

## Research output

### **Eruption style and dynamics of the ~ 87 ka Baricha peralkaline rhyolite eruption in Ethiopia**

Tadesse, A. Z., Fontijn, K., Wallace, P. A., Gurioli, L., Laha, P., Terryn, H. & Ayalew, D., Dec 2024, In: Bulletin of Volcanology. 86, 12, 18 p., 93.

### **Influence of convection during droplet evaporation on corrosion product distribution in CFRP-AA2024 galvanic couple: Modeling and experimental approaches**

Guerra-Camacho, L., Ruiz-Garcia, A., Godínez, F. A., Genesca, J., Terryn, H. & Montoya, R., Nov 2024, In: Corrosion Science. 240, 10 p., 112462.

### **On the rate determining step of cathodic delamination of delamination-resistant organic coatings**

Khayatan, N., Prabhakar, J. M., Jalilian, E., Madelat, N., Terryn, H. & Rohwerder, M., Oct 2024, In: Corrosion Science. 239, 12 p., 112396.

### **Monitoring atmospheric corrosion under multi-droplet conditions by electrical resistance sensor measurement**

Zhang, K., Rahimi, E., Van den Steen, N., Terryn, H., Mol, A. & Gonzalez-Garcia, Y., 1 Aug 2024, In: Corrosion Science. 236, 12 p., 112271.

### **Application of operando ORP-EIS for the in-situ monitoring of acid anion incorporation during anodizing**

Dabiri Havigh, M., Marcoen, K., Wouters, B., Hallemans, N., Bojinov, M., Hauffman, T., Lataire, J., Terryn, H. & Hubin, A., 20 Jul 2024, In: Electrochimica Acta. 493, 9 p., 144395.

### **Atmospheric corrosion of iron under a single droplet: A new systematic multi-electrochemical approach**

Rahimi, E., Zhang, K., Kosari, A., Van den Steen, N., Homborg, A., Terryn, H., Mol, A. & Gonzalez-Garcia, Y., 15 Jul 2024, In: Corrosion Science. 235, 13 p., 112171.

### **Effect of Impregnation of PEDOT:PSS in Etched Aluminium Electrodes on the Performance of Solid State Electrolytic Capacitors**

Calabia Gascon, N., Hubin, A., Terryn, H. & Wouters, B., 2 Jul 2024, In: Inorganics. 12, 7, 20 p., 185.

### **Surface engineering of aerospace aluminium alloys: Understanding alloying effects on chemical pre-treatment and sol-gel coating adhesion**

van Dam, J. P. B., Tiringier, U., Abrahami, S. T., Milošev, I., Terryn, H., Kovač, J. & Mol, J. M. C., 15 Jun 2024, In: Surface and Coatings Technology. 485, 15 p., 130901.

### **Corrosion resistance of electroplated coatings based on chromium trivalent-baths**

León, J., Ter-Ovanessian, B., Normand, B., Terryn, H., Özkaya, B., Lekka, M., Grande, H. J., García-Lecina, E. & Vega, J. M., 15 Apr 2024, In: Surface and Coatings Technology. 481, 130616.

### **On the Interaction between PEDOT:PSS Dispersions and Aluminium Electrodes for Solid State Electrolytic Capacitors**

Calabia Gascon, N., Hubin, A., Terryn, H., Revilla, R. I. & Wouters, B., 5 Apr 2024, In: Inorganics. 12, 4, 18 p., 104.

### **Advancing Surgical Arrhythmia Ablation: Novel Insights on 3D Printing Applications and Two Biocompatible Materials**

Monaco, C., Kronenberger, R., Talevi, G., Pannone, L., Cappello, I. A., Candelari, M., Ramak, R., Della Rocca, D. G., Bori, E., Terryn, H., Baert, K., Laha, P., Krasniqi, A., Gharaviri, A., Bala, G., Chierchia, G. B., La Meir, M., Innocenti, B. & de Asmundis, C., Apr 2024, In: Biomedicine. 12, 4, 13 p., 869.

### **Investigating the influence of pigmentation on the electrolyte transport properties of organic coatings using ORP-EIS**

Madelat, N., Wouters, B., Visser, P., Jiryaeisharahi, Z., Marcoen, K., Abrahami, S. T., Hubin, A., Terryn, H. & Hauffman, T., Feb 2024, In: Corrosion Science. 227, 14 p., 111699.

### **Forsteritic olivine in EH (enstatite) chondrite meteorites: A record of nebular, metamorphic, and crystal-lattice diffusion effects**

McKibbin, S. J., Hecht, L., Makarona, C., Huber, M., Terryn, H. & Claeys, P., 2024, In: Meteoritics & Planetary Science. 59, 6, p. 1277–1296 20 p., 14147.

**Exploring the potential of transfer learning in extrapolating accelerated corrosion test data for long-term atmospheric corrosion forecasting**

Vangrunderbeek, V., Coelho, L. B., Zhang, D., Li, Y., Van Ingelgem, Y. & Terryn, H., Dec 2023, In: Corrosion Science. 225, 11 p., 111619.

**Non-stationarity in electrochemical impedance measurement of Mg-based materials in aqueous media**

Wang, L., Snihirova, D., Dabiri Havigh, M., Deng, M., Lamaka, S., Terryn, H. & Zheludkevich, M., 10 Nov 2023, In: Electrochim Acta. 468, p. 1-18 18 p., 143140.

**In situ monitoring of the lateral water diffusion in coated metals using dual odd random phase EIS**

Madelat, N., Wouters, B., Claessens, R., Jiryaeisharahi, Z., Hubin, A., Terryn, H. & Hauffman, T., Oct 2023, In: Electrochemistry Communications. 155, 107577.

**Operando odd random phase electrochemical impedance spectroscopy (ORP-EIS) for in-situ monitoring of the Zr-based conversion coating growth in the presence of (in)organic additives**

Dabiri Havigh, M., Nabizadeh, M., Wouters, B., Halleman, N., Hauffman, T., Lataire, J., Hubin, A. & Terryn, H., Oct 2023, In: Corrosion Science. 223, 10, 10 p., 111469.

**FEM modelling to predict spatiotemporally resolved water uptake in organic coatings: Experimental validation by odd random phase electrochemical impedance spectroscopy measurements**

Meeusen, M., van dam, J., Madelat, N., Jalilian, E., Wouters, B., Hauffman, T., Van Assche, G., Mol, A. J. M. C., Hubin, A. & Terryn, H., Sep 2023, In: Progress in Organic Coatings. 182, p. 1-11 11 p., 107710.

**An ORP-EIS approach to distinguish the contribution of the buried interface to the electrochemical behaviour of coated aluminium**

Madelat, N., Wouters, B., Jiryaeisharahi, Z., Hubin, A., Terryn, H. & Hauffman, T., 1 Jul 2023, In: Electrochimica Acta. 455, 15 p., 142400.

**Surface modification of biodegradable Mg alloy by adapting  $\mu$ EDM capabilities with cryogenically-treated tool electrodes**

Davis, R., Singh, A., Debnath, K., Keshri, A. K., Soares, P., Sopchenski, L., Terryn, H. A. & Prakash, V., Jun 2023, In: International Journal of Advanced Manufacturing Technology. 126, 9-10, p. 4617-4636 20 p.

**New insight in epicardial ablations: 3D-printed additive manufacturing as intra-procedural diagnostic and operative tool**

Monaco, C., Pannone, L., Della Rocca, D. G., Talevi, G., Cappello, I. A., Ramark, R., Candelari, M., Terryn, H., Baert, K., Laha, P., Bori, E., Gharaviri, A., La Meir, M., Innocenti, B. & De Asmundis, C., 24 May 2023, In: Europace. 25, Supplement\_1, 3 p.

**Study on the roles of bisulfite in the stress corrosion cracking of 7050-T7451 aluminum alloy in the thin electrolyte layer environment**

Wang, M., Wang, L., Yang, W., Liu, Y., Terryn, H. & Cui, Z., 1 May 2023, In: Corrosion Science. 215, 111030.

**Identification of carbon-containing phases in electrodeposited hard Fe–C coatings with intentionally codeposited carbon**

Marcoen, K., Gauvin, M., De Cleene, A., Obitsø Nielsen, J., Baert, K., Terryn, H., De Strycker, J., Hauffman, T. & Pantleon, K., May 2023, In: Surface and Interface Analysis. 55, 5, p. 336-346 11 p.

**Pre-eruptive storage conditions and magmatic evolution of the Bora-Baricha-Tullu Moye volcanic system, Main Ethiopian Rift**

Tadesse, A. Z., Fontijn, K., Caricchi, L., Bégué, F., Gudbrandsson, S., Smith, V. C., Gopon, P., Debaille, V., Laha, P., Terryn, H., Yirgu, G. & Ayalew, D., Apr 2023, In: Lithos. 442-443, 2023, 20 p., 107088.

**Differentiating between the diffusion of water and ions from aqueous electrolytes in organic coatings using an integrated spectro-electrochemical technique**

Madelat, N., Wouters, B., Jalilian, E., Van Assche, G., Hubin, A., Terryn, H. & Hauffman, T., Mar 2023, In: Corrosion Science. 212, 110919.

**Investigation of hybrid Zr-aminosilane treatment formation on zinc substrate and comparison to advanced high strength stainless steel**

Nabizadeh, M., Marcoen, K., Amine Mernissi Cherigui, E., Dabiri Havigh, M., Kolberg, T., Schatz, D., Terryn, H. & Hauffman, T., 1 Feb 2023, In: Applied Surface Science. 610, 155554.

**The effect of pH on the corrosion protection of aluminum alloys in lithium-carbonate-containing NaCl solutions**

Michailidou, E., Visser, P., Mol, J. M. C., Kosari, A., Terryn, H., Baert, K. & Gonzalez-Garcia, Y., Jan 2023, In: Corrosion Science. 210, 14 p., 110851.

**Enhanced abrasive-mixed- $\mu$ -EDM performance towards improved surface characteristics of biodegradable Mg AZ31B alloy**

Davis, R., Singh, A., Debnath, K., Och, S. H., Keshri, A. K., Santos, L. S., Terryn, H. A. & Soares, P., 17 Dec 2022, In: International Journal of Advanced Manufacturing Technology. 124, 7-8, p. 2685–2700 16 p.

**Two-dimensional tellurium superstructures on Au(111) surfaces**

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**Unravelling the chemisorption mechanism of epoxy-amine coatings on Zr-based converted galvanized steel by combined static XPS/ToF-SIMS approach**

Cristaudo, V., Baert, K., Laha, P., Lim, M. L., Steely, L., Brown-Tseng, E., Terryn, H. & Hauffman, T., 15 Oct 2022, In: Applied Surface Science. 599, 153798.

**New insights into the mechanism of localised corrosion induced by TiN-containing inclusions in high strength low alloy steel**

Liu, C., Revilla, R. I., Li, X., Jiang, Z., Yang, S., Cui, Z., Zhang, D., Terryn, H. & Li, X., 10 Oct 2022, In: Journal of Materials Science and Technology. 124, p. 141-149 9 p.

**The Role of Cu-Based Intermetallic on the Direct Growth of a ZnAl LDH Film on AA2024**

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**Growth kinetics and passive behavior of the native oxide film on additively manufactured AlSi10Mg versus the conventional cast alloy**

Revilla, R. I., Terryn, H. & De Graeve, I., 15 Jul 2022, In: Corrosion Science. 203, 10 p., 110352.

**Unraveling the formation mechanism of hybrid Zr conversion coating on advanced high strength stainless steels**

Nabizadeh, M., Marcoen, K., Amine Mernissi Cherigui, E., kolberg, T., Schatz, D., Terryn, H. & Hauffman, T., 15 Jul 2022, In: Surface and Coatings Technology. 441, 12 p., 128567.

**Predicting the effect of droplet geometry and size distribution on atmospheric corrosion**

Van Den Steen, N., Gonzalez-Garcia, Y., Mol, J. M. C., Terryn, H. & Van Ingelgem, Y., 1 Jul 2022, In: Corrosion Science. 202, 110308.

**Adhesion properties of tartaric sulfuric acid anodic films assessed by a fast and quantitative peel tape adhesion test**

Martinez-Viademonte, M. P., Abrahami, S. T., Hack, T., Burchardt, M. & Terryn, H., Jul 2022, In: International Journal of Adhesion and Adhesives. 116, 103156.

**The Role of Anodising Parameters in the Performance of Bare and Coated Aerospace Anodic Oxide Films**

Martinez-Viademonte, M. P., Abrahami, S. T., Havigh, M. D., Marcoen, K., Hack, T., Burchardt, M. & Terryn, H., Jul 2022, In: Coatings. 12, 7, 23 p., 908.

**Corrosion challenges towards a sustainable society**

Bender, R., Revilla, R. I., De Graeve, I. & Terryn, H., 14 Jun 2022, In: Materials and Corrosion. 73, 11, p. 1730-1751 22 p.

**Fabrication of a molecularly imprinted monolithic column via the epitope approach for the selective capillary microextraction of neuropeptides in human plasma**

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**Metal-organic framework ZIF-8 for exceptional HCl removal from Hydrogen gas by reaction**

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**Corrosion inhibition of AA6060 by silicate and phosphate in automotive organic additive technology coolants**

Coelho, L. B., Lukaczynska-Anderson, M., Clerick, S., Buytaert, G., Lievens, S. & Terryn, H. A., 1 May 2022, In: *Corrosion Science*. 199, 110188.

**Decoupling of chemical and isotope fractionation processes during atmospheric heating of micrometeorites**

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**Growth mechanism study of silver nanostructures in a limited volume**

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**Revisiting the surface characterization of plasma-modified polymers**

Berckmans, J., Demaude, A., Merche, D., Baert, K., Terryn, H., Hauffman, T. & Reniers, F., May 2022, In: *Plasma Processes and Polymers*. 19, 5, 2100169.

**Operando odd random phase electrochemical impedance spectroscopy for in situ monitoring of the anodizing process**

Dabiri Havigh, M., Wouters, B., Halleman, N., Claessens, R., Lataire, J., Terryn, H. & Hubin, A., Apr 2022, In: *Electrochemistry Communications*. 137, 107268.

**The Hot-Stamping Effect on the Corrosion Properties of the 22MnB5 Steel Coated with Hot-Dip Aluminum-Silicon Assessed by a Salt Spray Test and Raman Spectroscopy**

Couto, C. P., Baert, K., Costa, I., Panossian, Z., De Graeve, I., Terryn, H., Rossi, J. L. & Revilla, R. I., Apr 2022, In: *Corrosion*. 78, 4, p. 339-349 11 p.

**Albumin Protein Adsorption on CoCrMo Implant Alloy: Impact on the Corrosion Behaviour at Localized Scale**

Rahimi, E., Offoiach, R., Baert, K., Terryn, H., Fedrizzi, L. & Lekka, M., Mar 2022, In: *Journal of the Electrochemical Society*. 169, 3, 031507.

**Eruption frequency and magnitude in a geothermally active continental rift: The Bora-Baricha-Tullu Moye volcanic complex, Main Ethiopian Rift**

Tadesse, A. Z., Fontijn, K., Melaku, A. A., Gebru, E. F., Smith, V. C., Tomlinson, E., Barfod, D., Gopon, P., Bégué, F., Caricchi, L., Laha, P., Terryn, H., Gudbrandsson, S., Yirgu, G. & Ayalew, D., Mar 2022, In: *Journal of Volcanology and Geothermal Research*. 423, 107471.

**Unraveling the mechanism of the conversion treatment on Advanced High Strength Stainless Steels (AHSS)**

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**Unravelling the Fe Effect on the Corrosion of Chromium Coatings: Chemical Composition and Semiconducting Properties**

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**Nanoscope and in-situ cross-sectional observations of Li-based conversion coating formation using liquid-phase TEM**

Kosari, A., Tichelaar, F., Visser, P., Taheri, P., Zandbergen, H., Terryn, H. & Mol, J. M. C., Dec 2021, In: npj Materials Degradation. 5, 1, 9 p., 40.

**Challenges to electrochemical evaluation of nanometric sandwiched thin specimens using liquid cells designed for application in liquid-phase TEM corrosion studies**

Kosari, A., Zandbergen, H., Tichelaar, F., Visser, P., Terryn, H. & Mol, J. M. C., Nov 2021, In: Corrosion Science. 192, 109864.

**Effect of hydrogen peroxide on bovine serum albumin adsorption on Ti6Al4V alloy: A scanning Kelvin probe force microscopy study**

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**A combined XPS/ToF-SIMS approach for the 3D compositional characterization of Zr-based conversion of galvanized steel**

Cristaudo, V., Baert, K., Laha, P., Lyn Lim, M., Brown-Tseng, E., Terryn, H. & Hauffman, T., 1 Oct 2021, In: Applied Surface Science. 562, 150166.

**On the relationship between the plasma characteristics, the microstructure and the optical properties of reactively sputtered TiO<sub>2</sub> thin films**

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**Scrutinizing the importance of surface chemistry versus surface roughness for aluminium/sol-gel film adhesion**

Tiringer, U., van Dam, J. P. B., Abrahami, S. T., Terryn, H., Kovac, J., Milosev, I. & Mol, J. M. C., Oct 2021, In: SURFACES AND INTERFACES. 26, 101417.

**Effect of Homogenization Temperature and Soaking Time on the Microstructure and Corrosion Properties of a Twin Roll Casted AA3003**

Verkens, D., Revilla, R. I., Günyüz, M., İşksaçan, C., Terryn, H. & De Graeve, I., Sep 2021, In: Corrosion. 77, 9, p. 991-1002 12 p.

**Influence of austenitisation temperatures during hot stamping on the local electrochemical behaviour of 22MnB5 steel coated with hot-dip Al-Si**

Couto, C. P., Revilla, R. I., Politano, R., Costa, I., Panossian, Z., De Graeve, I., Rossi, J. L. & Terryn, H., Sep 2021, In: Corrosion Science. 190, 109673.

**Laterally-resolved formation mechanism of a lithium-based conversion layer at the matrix and intermetallic particles in aerospace aluminium alloys**

Kosari, A., Tichelaar, F., Visser, P., Zandbergen, H., Terryn, H. & Mol, J. M. C., Sep 2021, In: Corrosion Science. 190, 109651.

**Li leaching from Li carbonate-primer: Transport pathway development from the scribe edge of a primer/topcoat system**

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**Monitoring initial contact of UV-cured organic coatings with aqueous solutions using odd random phase multisine electrochemical impedance spectroscopy**

Wouters, B., Jalilian, E., Claessens, R., Madelat, N., Hauffman, T., Van Assche, G., Terryn, H. & Hubin, A., Sep 2021, In: Corrosion Science. 190, 109713.

**Effect of Ce(III) and Ce(IV) ions on the structure and active protection of PMMA-silica coatings on AA7075 alloy**

Trentin, A., Harb, S. V., Uvida, M. C., Marcoen, K., Pulcinelli, S. H., Santilli, C. V., Terryn, H., Hauffman, T. & Hammer, P., 15 Aug 2021, In: Corrosion Science. 189, 13 p., 109581.

**Investigation of the importance of heat transfer during thin electrolyte formation in atmospheric corrosion using a novel experimental approach**

Koushik, B. G., Van den Steen, N., Terryn, H. & Van Ingelgem, Y., 15 Aug 2021, In: Corrosion Science. 189, 109542.

**Australasian microtektites across the Antarctic continent: Evidence from the Sør Rondane Mountain range (East Antarctica)**

Soens, B., van Ginneken, M., Chernonozhkin, S., Slotte, N., Debaille, V., Vanhaecke, F., Terryn, H., Claeys, P. & Goderis, S., Jul 2021, In: Geoscience Frontiers. 12, 4, 13 p., 101153.

**Mechanism of LDH Direct Growth on Aluminum Alloy Surface: A Kinetic and Morphological Approach**

Bouali, A. C., Iuzviuk, M. H., Serdechnova, M., Yasakau, K. A., Drozdenko, D., Lutz, A., Fekete, K., Dovzhenko, G., Wieland, D. C. F., Terryn, H., Ferreira, M. G. S., Zobkalo, I. A. & Zheludkevich, M. L., 3 Jun 2021, In: Journal of Physical Chemistry C. 125, 21, p. 11687-11701 15 p.

**Assessment of Carbon-Titanium Multilayer Coatings on Aluminum as Bipolar Plates in PEM Fuel Cells**

Dabiri Havigh, M., Hubin, A. & Terryn, H., Jun 2021, In: Journal of the Electrochemical Society. 168, 6, 061503.

**Depth profiling approach to evaluate the influence of hot stamping on the local electrochemical behaviour and galvanic series of hot-dip Al-Si coating on 22MnB5 steel**

Couto, C. P., Andreatta, F., Lanzutti, A., Costa, I., Panossian, Z., De Graeve, I., Terryn, H., Rossi, J. L. & Revilla, R. I., Jun 2021, In: Corrosion Science. 185, 109435.

**The mechanism of thermal oxide film formation on low Cr martensitic stainless steel and its behavior in fluoride-based pickling solution in conversion treatment**

Nabizadeh, M., Boissy, C., Baert, K., Goderis, S., Ottevaere, P. D. I. H., Terryn, H. & Hauffman, T., 1 Apr 2021, In: Corrosion Science. 181, p. 109-206 14 p., 109206.

**A dataset of high-resolution synchrotron x-ray photoelectron spectra of tarnished silver-copper surfaces before and after reduction with a remote helium plasma at atmospheric pressure**

Schalm, O., Patelli, A., Storme, P., Crabbé, A., Voltolina, S., Feyer, V. & Terryn, H., Apr 2021, In: Data in Brief. 35, p. 106872 13 p., 106872.

**Editors' Choice - Dealloying-Driven Cerium Precipitation on Intermetallic Particles in Aerospace Aluminium Alloys**

Kosari, A., Ahmadi, M., Tichelaar, F., Visser, P., Gonzalez-Garcia, Y., Zandbergen, H., Terryn, H. & Mol, J. M. C., Apr 2021, In: Journal of the Electrochemical Society. 168, 4, 15 p., 041505.

**Role of phosphate, calcium species and hydrogen peroxide on albumin protein adsorption on surface oxide of Ti6Al4V alloy**

Rahimi, E., Offoiach, R., Baert, K., Terryn, H., Lekka, M. & Fedrizzi, L., Mar 2021, In: Materialia. 15, 13 p., 100988.

**Long-term deterioration of lubricant-infused nanoporous anodic aluminium oxide surface immersed in NaCl solution**

Wu, D., Ma, L., Liu, B., Zhang, D., Minhas, B., Qian, H., Terryn, H. A. & Mol, J. M. C., 20 Feb 2021, In: Journal of Materials Science and Technology. 64, p. 57-65 9 p.

### **Effect of Sr Addition to a Modified AA3003 on Microstructural and Corrosion Properties**

Verkens, D., Revilla, R. I., Huizenga, R., Marcoen, K., Günyüz, M., Isiksacan, C., Terryn, H. & De Graeve, I., 3 Feb 2021, In: Journal of the Electrochemical Society. 168, 2, 9 p., 021506.

### **Review on modelling of corrosion under droplet electrolyte for predicting atmospheric corrosion rate**

Koushik, B. G., Van den Steen, N., Mamme, M. H., Van Ingelgem, Y. & Terryn, H., 1 Feb 2021, In: Journal of Materials Science and Technology. 62, p. 254-267 14 p.

### **Towards a better understanding of localised corrosion induced by typical non-metallic inclusions in low-alloy steels**

Liu, C., Li, X., Revilla, R. I., Sun, T., Zhao, J., zhang, D., Yang, S., Liu, Z., Cheng, X., Terryn, H. & Li, X., Feb 2021, In: Corrosion Science. 179, 109150.

### **Dual-action self-healing protective coatings with photothermal responsive corrosion inhibitor nanocontainers**

Ma, L., Wang, J., Zhang, D., Huang, Y., Huang, L., Wang, P., Qian, H., Li, X., Terryn, H. A. & Mol, J. M. C., 15 Jan 2021, In: Chemical Engineering Journal. 404, 127118.

### **Electrochemical and surface characterization study on the corrosion inhibition of mild steel 1030 by the cationic surfactant cetrimonium trans-4-hydroxy-cinnamate**

Puelles, J. S., Ghorbani, M., Yunis, R., MacHuca, L. L., Terryn, H., Forsyth, M. & Somers, A. E., 1 Jan 2021, In: ACS Omega. 6, 3, p. 1941-1952 12 p.

### **Tarnished silver–copper surfaces reduction using remote helium plasma at atmospheric pressure studied by means of high-resolution synchrotron x-ray photoelectron microscopy**

Schalm, O., Patelli, A., Storme, P., Crabbé, A., Voltolina, S., Feyer, V. & Terryn, H., Jan 2021, In: Corrosion Science. 178, 9 p., 109074.

### **Dealloying-driven local corrosion by intermetallic constituent particles and dispersoids in aerospace aluminium alloys**

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**Interaction of ester functional groups with aluminium oxide surfaces studied using infrared reflection absorption spectroscopy**

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**Investigation of the barrier properties of silanes on cold rolled steel**

VAN SCHAFTINGHEN, T., Le Pen, C., Terryn, H. & Hörzenberger, F., 2004, In: Unknown Journal.

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**XPS study of the atmospheric corrosion of copper alloys of archaeological interest**

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**Influence of local heat development on film thickness for anodizing aluminium in sulfuric acid**

De Graeve, I., Terryn, H. & Thompson, G. E., 2003, In: Unknown Journal.

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**Quantitative chemical composition of thin films with infrared spectroscopic ellipsometry : application of hydrated oxide films on aluminium**

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**Study of the cryolite formation during the zinc phosphating of aluminium**

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**Controlling the roughness of aluminium substrates by electrochemical processing**

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**Influence of heat transfer on anodic oxidation of aluminium**

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**Study of the cryolite formation during the zinc phosphation of aluminium**

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**'Study of the formation of chromate conversion coatings on Alclad 2024 aluminium alloy using spectroscopic ellipsometry'**

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**Study of the formation of chromate conversion coatings on Alclad 2024 aluminium alloys using spectroscopic ellipsometry**

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**Surface treatments of aluminium to enhance optical reflectance**

Van Gils, S., Buytaert, G., Stijns, E. & Terryn, H., 2002, In: Unknown Journal.

**Use of spectro-sopic ellipsometry to study Zr/Ti films on Al**

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**Determination of the thickness of thin silane films on aluminium by means of spectroscopic ellipsometr**

FRANQUET, ALEXIS., De Laet, J., SCHRAM, T., Terryn, H., Subramanian, V., Van Ooij, W. J. & Vereecken, J., 2001, In: Unknown Journal.

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**Study of the corrosion protection of steel with thin organic coatings**

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**The measurement of Appearance of Aluminium Surfaces: a surface analytical and statistical approach**

Van Der Linden, B., HOLTEN, S., Terryn, H. & Stijns, E., 2001, In: Unknown Journal.

**The use of infrared spectroscopic ellipsometry for the thickness determination and molecular characterization of thin films on aluminium**

SCHRAM, T. & Terryn, H., 2001, In: Unknown Journal.

**AC-electrochemical cleaning of aluminium**

De Graeve, I. & Terryn, H., Jan 2000, In: Transactions of the Institute of Metal Finishing. 78, p. 35-40 6 p.

**AC Electrograining of aluminium in hydrochloric and nitric acid : a comparative study**

Terryn, H., Kernig, B., Hubin, A. & LAEVERS, P., 2000, In: Transactions of the Institute of Metal Finishing. 78, 1, p. 29-34

**Aluminium in autos een doorbraak ?**

Baekelandt, J. P., De Smet, P. & Terryn, H., 2000, In: Unknown Journal.

**'DC/AC Anodizing and AC Electrochemical cleaning of aluminium : comparative process investigation and study of the influence of heat transfer in a wall-jet electrode reactor'**

De Graeve, I., Terryn, H. & Verboom, E., 2000, In: Unknown Journal.

**Development of grained surfaces during EC graining in hydrochloric and nitric acid**

Kernig, B., Terryn, H. & Hubin, A., 2000, In: ATB Métallurgie. 3-4, p. 335-341

**Feasibility study to probe thin inorganic and organic coatings on aluminium substrates by means of visible and infra red spectroscopic ellipsometry**

SCHRAM, T. & Terryn, H., 2000, In: Unknown Journal.

**Study of silane films on aluminium by means of spectroscopic ellipsometry and Auger electron spectroscopy**

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**The measurement of appearance of aluminium surfaces : a surface analytical and a statistical approach**

Van Der Linden, B., HOLTEN, S., Terryn, H. & Stijns, E., 2000, In: Unknown Journal.

**The use of spectroscopic ellipsometry for the characterisation of conversion coatings on aluminium**

SCHRAM, T., Laha, P. & Terryn, H., 2000, In: Unknown Journal.

**Thin film analysis of chromium-phosphate conversion coatings on aluminium probed by ToF-SIMS and electron probe x-ray analysis**

Cuynen, E., Goeminne, G., Van Espen, P. & Terryn, H., 2000, In: Unknown Journal.

**XPS investigations on cesium uranates : mixed valency behaviour of uranium'**

Van Den Berghe, S., Laval, J. P., Gaudreau, B., Terryn, H. & Verwerft, M., 2000, In: Journal of Nuclear Materials. 277, 1, p. 28-36

**Conversiesystemen en hun toekomst**

Terryn, H., 1999, In: Unknown Journal.

**On the structure and chemical composition of chromium based conversion coatings on aluminium : a TOF SIMS study**

Cuynen, E., Van Espen, P., Goeminne, G. & Terryn, H., 1999, In: Unknown Journal.

**Spectroscopic ellipsometry, a non-destructive technique for surface analysis**

SCHRAM, T., FRANQUET, ALEXIS., Terryn, H. & Vereecken, J., 1999, In: Unknown Journal.

**Non-destructive optical characterisation of chromium conversion layers on aluminium**

Schram, T., De Laet, J. & Terryn, H., Feb 1998, In: Thin Solid Films. 313, p. 727-731 5 p.

## Projects

**OZR1497: Adhesion and delamination of organic coatings on top of modified oxide layers.**

Terryn, H.

1/01/07 → 31/12/08

**IWT243: Adhesion and delamination of organic coatings on top of modified oxide layers.**

Terryn, H.

1/01/05 → 31/12/08

**IWT242: Appearance of thin films on steel: development on characterisation of modelsystems.**

Terryn, H.

1/01/05 → 31/12/08

**OZR1499: Appearance of thin films on steel: development on characterisation of modelsystems.**

Terryn, H.

1/01/07 → 31/12/08

**OZR2355: Bilateral cooperation in the framework of mutual doctoral projects\_Bench fee Joint PhD VUB-UGent, Roberto Gaggiano**

Terryn, H. & Gaggiano, R.  
20/01/12 → 1/11/17

**OZR3341: Bilateral cooperation within the framework of a joint doctoral project: benchfee for joint PhD VUB - ULB BIDEGARAY Anne-Isabelle**

Terryn, H.  
21/02/17 → 20/02/21

**OZR3527: Bilateral cooperation within the framework of a joint doctoral project: benchfee for joint PhD VUB - USP (Brazil), PUCCI COUTO Camila**

Terryn, H.  
24/02/20 → 23/02/24

**OZR2811: Bilaterale samenwerking ikv gemeenschappelijk doctoraatsproject: Bench fee voor Joint PhD, VUB-UGent, Henrique Duarte Alvarenga**

Terryn, H.  
10/06/15 → 31/12/16

**EU230: Characterisation of thin films on rough steel substrates.(OCAS)**

Terryn, H.  
1/07/05 → 31/12/08

**IWT414: CHILLY : Improved cut edge corrosion protection of painted Al-rich metallic coated steel.**

Terryn, H., Vereecke, M., Van Poelvoorde, G., Vandeputte, S. & Standaert, C.  
1/11/07 → 31/10/10

**OZR1996: Co-financing EFRO Project (EMOVO)**

Ir, D. & Terryn, H.  
1/01/10 → 31/12/11

**FWOIRI12: Commissioning and sustainable exploitation of the upgraded DUBBLE beamlines at the ESRF: studying the structure and function of matter at the world's most powerful synchrotron**

Terryn, H.  
1/01/23 → 31/12/26

**CONO513: Congres: Electrochemical methods for nanotechnology (EMNT) (17/08/2016 - 19/08/2016)**

Terryn, H.  
27/07/15 → 31/12/16

**BRGCON21: Connect 2020: VIPCOAT : Virtual open Innovation Platform for active protective COATings guided by modelling and optimization**

Terryn, H. & Hubin, A.  
15/03/20 → 14/05/20

**OZR2389: Corrosie tot leven gebracht: een micro-elektrochemische reis van micro- naar biocorrosie.**

Terryn, H.  
1/10/12 → 30/09/13

**IWT699(SIM05): DeMoPreCi-MDT: Development, Monitoring and prediction of Coupled Interactions in Material Durability Testing**

Van Ingelgem, Y. & Terryn, H.  
1/01/15 → 1/01/19

**OZRMETH5: Design and Prediction of Nanostructured Metal Surfaces**

Hubin, A. & Terryn, H.

1/01/12 → 30/09/23

**IWT457: Doctoral Project: study of surface modification on Anodic aluminum oxidefilms (silica labelling and adhesion)**

Terryn, H.

1/01/09 → 31/12/10

**EU665: DurAMAT: Sustainable production, processing and modelling of durable additive manufactured materials for enhanced performance and long-term service in complex environments**

De Graeve, I. & Terryn, H.

1/10/23 → 30/09/27

**FWOAL527: Electrochemical generation and property modification of supported metal and alloy nanoparticles**

Terryn, H., Van Haesendonck, C. & Bals, S.

1/01/09 → 31/12/12

**FWOAL708: Electrochemical synthesis of metal nanostructures**

Terryn, H., Deconinck, J., Hubin, A. & Bals, S.

1/01/14 → 31/12/17

**OZR1130: Elektronenspectroscopie op nanometerschaal van inorganische en organische lagen op oxideoppervlakken.**

Terryn, H.

1/01/05 → 31/12/08

**FWOAL318: Elektronenspectroscopie op nanometerschaal van organische lagen op oxide-oppervlakken.**

Terryn, H. & Hubin, A.

1/01/05 → 31/12/08

**CRC Durable Materials: EUTOPIA Connected Research Community Durable Materials**

Terryn, H., De Graeve, I. & Revilla Castillo, R. I.

**BOR11: Exchanges Capcoat**

Terryn, H. & Vandendael, I.

2/12/13 → 2/12/17

**IOF542: Financing IOF program**

Deconinck, J., Hubin, A., Hubin, A., Van Damme, S., De Wilde, D., Maciel, P. & Terryn, H.

1/05/07 → 30/04/14

**DWTC239: FOMOS: Funktionele eigenschappen door gemengde nano organische/metaal oxyde systemen.**

Terryn, H., De Graeve, I. & Vereecken, J.

15/12/06 → 30/06/10

**IWT685(SIM5): FUNC : Tools for dry nanofunctionalization of particles and fibrous materials**

Terryn, H., Van Assche, G., Bals, S., Detavernier, C. & Annick, V.

1/08/14 → 31/07/18

**OZR1673: Functionele eigenschappen van organische/metaal oxyde systemen.**

Terryn, H.

1/01/08 → 31/12/08

**FWOSB19: FWO-SB-Beurs: Probing of formation and degradation of the chemical interface between metal (oxides) and organic coatings**

Terryn, H. & Pletincx, S.

1/01/16 → 31/12/19

**IOF3020: GEAR: Sustainable Material Technologies (SuMaT).**

Hubin, A., Terryn, H., De Graeve, I., Hauffman, T., Van Ingelgem, Y., Rahier, H., Van Assche, G., Van den Brande, N., De Proft, F., Tielens, F., Collet, T. M. & Wouters, B.

1/01/21 → 31/12/25

**FWOTM715: Glass recycling, past and present. A glass recycling model based on a multi-analytical approach to archaeological glassware from Cyprus in Late Antiquity (4th-7th century AD) in parallel to modern glass recycling issues**

Terryn, H., Nys, K. & Bidegaray, A.

1/10/14 → 30/09/18

**BRGEOZ147: GREENCOAT: Development of "green" coatings with multifunctional properties (+ VERLENGING)**

Terryn, H., Van Mele, B., Van Assche, G., De Graeve, I., Scheltjens, G. & Kakaroglou, A.

1/05/09 → 30/04/14

**OZR1674: Hard anodisatie van draailegeringen.**

Terryn, H.

1/01/08 → 31/12/08

**OZR3699: H2020: VIPCOAT: Virtual Open Innovation Platform for Active Protective Coatings Guided by Modelling and Optimization (OZR EU BONUS)**

Hauffman, T., Terryn, H. & Terryn, H.

1/05/21 → 30/04/25

**EUAR52: H2020: Virtual Open Innovation Platform for Active Protective Coatings Guided by Modelling and Optimization**

Hauffman, T. & Terryn, H.

1/05/21 → 30/04/25

**FWOAL65: Identificatie van chemische componenten op metaaloppervlakken en in deklagen.**

Hubin, A. & Terryn, H.

1/01/98 → 31/12/01

**FWOAL263: Identification by means of optical techniques of interaction products formed during surface reactions of metals.**

Hubin, A., Vereecken, J., Terryn, H. & Blajiev, O.

1/01/03 → 31/12/06

**FWOKN65: In vitro systems for the immortalization of multiple myeloma plasma cells and their precursors.**

Terryn, H.

1/01/00 → 31/12/02

**HERC35: Infra-Red Analyses from Macro to Nano Scales. From Novel Self-healing Materials to Jurassic Dinosaur Bone Cells**

Terryn, H., Hauffman, T., Claeys, P., Snoeck, C., Denayer, J., Cousin-Saint-Remi, J., Van Assche, G. & Nys, K.

1/05/16 → 30/04/20

**OZR2932: Infra-red Analyses from Macro to Nano Scales. From Novel Self-healing Materials to Jurassic Dinosaur Bone Cells**

Terryn, H.

1/03/16 → 1/03/20

**CONI513: INSCHRIJVINGEN: Congres: Electrochemical methods for nanotechnology (EMNT) (17/08/2016 - 19/08/2016)**

Terryn, H.

27/07/15 → 31/12/16



**CONI448: INSCHRIJVINGEN Electrochemical Doctoral School: Corrosion: from analysis to modelling 21 – 25 October, 2013 Brussels**

Terryn, H.

24/09/13 → 31/12/13

**FWOAL445: In-situ spectroscopic investigation of organic (mono)layers adsorbed on metal and metal oxide surfaces under controlled deposition conditions**

Hubin, A. & Terryn, H.

1/01/08 → 31/12/11

**FWOTM491: In-situ study and modelling of the controlled growth of ultra-thin organic layers on metallic oxides.**

Terryn, H.

1/10/08 → 30/09/12

**IWT88: Investigation of different surface pre-treatments on rolled aluminium for automotive applications.**

Terryn, H.

1/03/00 → 28/02/02

**IWT43: Investigation of the relation between optical and morphological properties of aluminium surfaces for the production of mirror finish materials.**

Terryn, H.

1/07/98 → 31/12/00

**IOFACC6: IOF Accelerator: a generic toolbox for the reliable prediction of lifetime and ageing in electrochemical systems**

Hubin, A., Terryn, H., De Graeve, I., Van Ingelgem, Y., Van Assche, G., Pintelon, R., Van Mierlo, J., Berecibar, M., Wouters, B., Van Laethem, D. & Zhu, X.

1/01/19 → 20/12/21

**IOFACC11: IOF Accelerator: "Sustainable Material Technologies (SuMaT)".**

Hubin, A., Terryn, H., De Graeve, I., Hauffman, T., Van Ingelgem, Y., Rahier, H., Van Assche, G., Van den Brande, N., De Proft, F., Tielens, F. & Collet, T. M.

1/10/22 → 30/09/24

**CONO787: Jaarlijks evenement van de Europese Federatie voor Corrosie - Eurocorr2023, Brussel (organisatie evenement)**

De Graeve, I. & Terryn, H.

27/08/23 → 31/12/24

**EU183: LEONARDO-contract : AluMATTER /tussen European Aluminium Association (EAA) en VUB (= 4de partner) en dit ikv ov tussen EC en EAA.**

Terryn, H.

1/12/02 → 30/11/05

**BRGEOZ315: Maintenance intervals and structural lifetime extension in off-shore, coastal, arctic and other harsh environments.**

Terryn, H.

27/08/16 → 27/10/16

**EU552: mCBEEs: Advanced integrative solutions to Corrosion problems beyond micro-scale: towards long-term durability of miniaturized Biomedical, Electronic and Energy systems**

Terryn, H.

European Commission

1/10/17 → 30/09/21

**EU407: NANEL**

Terryn, H.  
1/01/12 → 31/12/14

**VLZWA1: Nanometer geresolveerde oppervlakte analyse.**

Deconinck, J., Hubin, A., Terryn, H., Bossuyt, S. & Vereecken, J.  
1/01/04 → 31/12/05

**IWT540 (SIM1): NAPROM (Novel Active PROtection systems On Metals)**

Terryn, H., De Graeve, I., Hubin, A., Van Mele, B. & Van Assche, G.  
1/03/11 → 31/05/15

**EU360: NARNIA: New Archaeological Research Network for Integrating Approaches to ancient materialstudies**

Claeys, P., Thienpont, H., Nys, K., Terryn, H., Meulebroeck, W., Makarona, C., Ceglia, A., Baert, K. & Nys, K.  
1/12/10 → 30/11/14

**HOA15: Non-destructive Optical analysis of Cultural Heritage Materials**

Nys, K., Terryn, H., Thienpont, H. & Meulebroeck, W.  
1/01/08 → 31/12/11

**FWOTM705: On the physiochemical properties of the interface between nanometer thin polymer films and nano-controlled oxide layers**

Hauffman, T. & Terryn, H.  
1/10/13 → 30/09/19

**OZR1675: Ontwikkeling van atmosferische plasma processen voor antibacteriele coatings op staal.**

Terryn, H.  
1/01/08 → 31/12/08

**VLAOO17: O&O Project : Coating degradation under insulation - Data analytics for online monitoring.**

Terryn, H.  
1/10/21 → 31/12/24

**VLAOO21: O&O project: Coolants for Electrical powertrains: Research & Modeling for Innovative Technologies**

Terryn, H., Bercibar, M., Hubin, A., Kalogiannis, T. & Boursot, I.  
1/03/22 → 31/08/24

**VLAOO6: O&O project POLCAP : Novel Conductive Polymers for next-gen polymer Capacitors**

Terryn, H.  
1/10/19 → 30/06/22

**CONI252: Organisation of the ECASIA Conference**

Hauffman, T., Terryn, H. & Reniers, F.  
19/06/08 → ...

**OZR1545: Participation to IUAP6-UA81 : Quantum effects in clusters en nanowires.**

Terryn, H.  
1/01/07 → 31/12/11

**FWOSB166: Predictive machine learning of the long-term atmospheric corrosion damage**

Vangrunderbeek, V., Hubin, A., Terryn, H. & Van Ingelgem, Y.  
1/11/23 → 31/10/27

**IWT45: Procesintensificatie van de microbiële productie van L(+)-wijnsteenzuur d m v celimmobilisatie met synthetische membranen**

Terryn, H.  
1/01/99 → 31/12/00

**IWT20176: Production of rolled aluminium with predicted surface behaviour.**

Terryn, H. & Vereecken, J.  
1/01/94 → 31/12/97

**OZR2006: Research alliance group VUB-UGent: Materials and Surface Science & Engineering - MASS**

De Graeve, I., Terryn, H. & Verbeken, K.  
30/09/09 → ...

**IWT372: Samenwerkingsovereenkomst: Electro-colouring of Anodised Aluminium through continuous line processing.**

Terryn, H.  
1/03/07 → 28/02/09

**FWOSBO22: SBO: Predictcor: Knowledge and technology platform for prediction of durability and lifetime of organic coated metals under long-term environmental corrosion**

Terryn, H. & Van Assche, G.  
1/01/18 → 31/12/21

**FWOSBO30: SBO project with a primary economic finality aimed at the creation of a spin-off company: Hugh-Precision hybrid laser-based additive & subtractive manufacturing (Hi-PAS)**

Guillaume, P., Terryn, H., De Graeve, I., Pyl, L., Van Hemelrijck, D. & De Baere, D. J.  
1/01/19 → 31/12/22

**WDGO1859: Service Agreement : Coated Aluminium sample**

Terryn, H.  
1/10/19 → 31/03/20

**HERC55: Shooting stars and blasting dinosaurs: boosting ICP-MS capabilities across various research domains.**

Goderis, S., Olde Venterink, H., Tielens, F., Snoeck, C., Terryn, H., Nys, K., Leermakers, M., Claeys, P., Elskens, M., Kervyn De Meerendre, M., Lambert, B., Peeters, E., Hauffman, T., Rahier, H., Gao, Y., Meulebroeck, W. & Wouters, B.  
1/05/22 → 30/04/26

**EU277: SICOM - Simulation based corrosion management for aircraft**

Terryn, H., Deconinck, J., De Graeve, I., Van Damme, S. & Abodi, L.  
1/03/07 → 31/12/10

**IWT631 (SIM1): SIM-ICON: SHREC: Self-healing - repairing coatings**

Terryn, H. & Van Assche, G.  
1/11/12 → 31/10/15

**IWT653 (SIM): SIM-SBO: Mechanical properties and chemical bonding at the interfaces in polymer-based composite materials: INTERPOCO**

Terryn, H.  
1/03/14 → 31/03/17

**OZR1676: Simulatie gebaseerd corrosie management van vliegtuigen.**

Terryn, H.  
1/01/08 → 31/12/08

**EU559: SPINMULTIFILM: Physical principles of the creation of novel SPINtronic materials on the base of MULTIlayered metal-oxide FILMs for magnetic sensors and MRAM**

Terryn, H.  
European Commission  
1/01/18 → 30/06/23

**ADSP64: Sponsorgelden: Symposium INSECT2010 International Symposium on ElectroChemical Machining Technology. 4-5 november 2010**

Hubin, A., Terryn, H., Deconinck, J. & Deconinck, J.  
5/10/10 → ...

**ADSP84: Sponsoring "SIM Inauguration Day of the Local Electrochemical Lab"**

Terryn, H.  
8/05/12 → 8/05/16

**IWT119: Studie van de corrosiebescherming van staal door middel van milieuvriendelijke dunne organische lagen.**

Terryn, H.  
1/01/01 → 31/12/04

**IWT341: Studie van de invloed van de karakteristieken van oxides op de depositie van organische "Self-assembling monolagen".**

Terryn, H. & Hubin, A.  
1/01/07 → 30/09/08

**OZR1677: Studie van de invloed van de karakteristieken van oxides op de depositie van organische "self-assembling" monolagen.**

Terryn, H.  
1/01/08 → 31/12/08

**OZR499: Study of coatings by means of an integrated approach using complementary surface and micro analysis techniques SAM, XPS, SIMS and EPXMA.**

Terryn, H.  
1/01/96 → 31/12/99

**IWT20601: Study of preconditioning of rolled Al for automotive applications**

Terryn, H.  
1/01/96 → 30/06/98

**FWOAL394: Study of surface modification processes by means of local electrochemical methods.**

De Graeve, I., Hubin, A., Vereecken, J. & Terryn, H.  
1/01/06 → 31/12/09

**IWT390: Study of surface properties of Al coatings**

Terryn, H.  
1/01/08 → 31/12/11

**FWOAL573: Study of the Influence of the Microstructure on the Electrochemical Activity of Metals.**

Terryn, H., Hubin, A., De Graeve, I., Verbeken, K. & Kestens, L.  
1/01/10 → 31/12/13

**OZR1746: Surface Science and Analyses.**

Terryn, H.  
1/10/07 → 31/12/11

**FWOIR15: The DUBBLE Beam Lines at the ESRF: Extremely brilliant X-rays for revealing the structure and function of atoms, molecules and materials**

Terryn, H., Goderis, B., Vincze, L., Van Bael, M., Janssens, K., Adelman, C. & Snellings, R.  
1/01/19 → 31/12/22

**IWT155: The use of Raman spectroscopy for the chemic identification of corrosionproducts formed as a reult of atmospheric corrosion of bronze.**

Terryn, H.

1/01/02 → 31/12/05

**OZR462: The use of spectroscopie ellipsometry for the study of thin films on metals with different surface roughness.**

Stijns, E. & Terryn, H.

1/01/00 → 31/12/04

**HERC57: Thermal activity monitoring microcalorimetry: from fundamental thermodynamic principles towards a wide array of practical applications**

Van den Brande, N., Terryn, H., Denayer, J., Van Assche, G., Peeters, E., De Laet, L., Hauffman, T., Ballet, S. & Rahier, H.

1/05/22 → 30/04/26

**OZR1498: THINFILM: Karakterisatie van dunne filmen op ruwe staaloppervlakken.**

Terryn, H.

1/01/07 → 31/12/07

**HERC50: Towards a versatile photoelectron spectroscope for in situ interfacial molecular studies in materials science**

Hauffman, T., Ustarroz Troyano, J., Tielens, F., Abrahami, S., Terryn, H., Hubin, A., Denayer, J., Van Assche, G., Claeys, P., Ameloot, R. & Goderis, S.

1/05/20 → 30/04/24

**OZR3563: Towards a versatile photoelectron spectroscope for in situ interfacial molecular studies in materials science**

Hauffman, T., Ustarroz Troyano, J., Tielens, F., Abrahami, S., Terryn, H., Hubin, A., Denayer, J., Van Assche, G., Claeys, P., Ameloot, R. & Goderis, S.

1/05/20 → 30/04/24

**HERC33: Towards 3D-nanochemical analysis: Combined TOF-SIMS-SFM infrastructure at the service of R&D in Flanders**

Terryn, H., Manca, J. & Vandervorst, W.

1/10/14 → 30/09/20

**BRGEOZ204: Voorbereidend Project MEMPHIS: multi approach self-healing polymeric system for metal protection (ikv oproep "FP7.2012.NMP.Small 6")**

Terryn, H. & Cerexhe, B.

1/02/12 → 30/04/12

**HERC24: X-ray analytical instrumentation: From the Field to the micro-scale**

Nys, K., Claeys, P., Vandendael, I., Terryn, H. & Tys, D.

1/05/14 → 30/04/19

## Awards

**EU552: mCBEEs**

Terryn, H.

European Commission: €250,560.00

1/10/17 → 30/09/21

## Activities

**Unravelling the chemisorption mechanism of epoxy-amine coatings on Zr-based converted galvanized steel by combined static XPS/ToF-SIMS approach**

Vanina Cristaudo (Speaker), Zahra Jiryaesharahi (Contributor), Kitty Baert (Contributor), Priya Laha (Contributor), Lee Steely (Contributor), Daniel Clingerman (Contributor), Elizabeth Brown-Tseng (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

5 Nov 2023 → 10 Nov 2023

### **Aluminum Bipolar Plates in Proton Exchange Membrane Fuel Cells (PEMFCs)**

Meisam Dabiri Havigh (Contributor), Kitty Baert (Contributor), Annick Hubin (Speaker) & Herman Terryn (Contributor)  
27 Aug 2023 → 31 Aug 2023

### **Corrosion protection of galvanized steel by epoxy-amine coatings: An ORP-EIS investigation**

Vanina Cristaudo (Speaker), Benny Wouters (Contributor), Raf Claessens (Contributor), Negin Madelat (Contributor), Balaji Kannan (Contributor), Lee Steely (Contributor), Daniel Clingerman (Contributor), Elizabeth Brown-Tseng (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)  
27 Aug 2023 → 31 Aug 2023

### **Development of a new sensor-based method to investigate corrosion under insulation, supported by ORP-EIS data**

Zahra Jiryaesharahi (Speaker), Benny Wouters (Contributor), Herman Terryn (Contributor), Annick Hubin (Contributor), Yves Desmet (Contributor) & Drik De Keukeleere (Contributor)  
27 Aug 2023 → 31 Aug 2023

### **Monitoring of ongoing corrosion protection surface treatment processes by the operando ORP-EIS**

Meisam Dabiri Havigh (Speaker), Mohaddese Nabizadeh (Contributor), Benny Wouters (Contributor), Noel Halleman (Speaker), Tom Hauffman (Contributor), John Lataire (Contributor), Herman Terryn (Contributor) & Annick Hubin (Speaker)  
27 Aug 2023 → 31 Aug 2023

### **Operando Odd Random Phase Electrochemical Impedance Spectroscopy (ORP-EIS) for online and in situ monitoring of the anodizing of aluminum**

Meisam Dabiri Havigh (Presenter), Mohaddese Nabizadeh (Contributor), Benny Wouters (Contributor), Noel Halleman (Contributor), Tom Hauffman (Contributor), John Lataire (Contributor), Herman Terryn (Contributor) & Annick Hubin (Contributor)  
6 Jul 2023

### **Operando Odd Random Phase Electrochemical Impedance Spectroscopy (ORP-EIS) for in situ monitoring of the aluminum (Al) surface treatments**

Meisam Dabiri Havigh (Presenter), Mohaddese Nabizadeh (Contributor), Benny Wouters (Contributor), Noel Halleman (Contributor), Tom Hauffman (Contributor), John Lataire (Contributor), Herman Terryn (Contributor) & Annick Hubin (Contributor)  
24 May 2023

### **Aluminium bipolar plates in proton exchange membrane fuel cells (PEMFCs)**

Meisam Dabiri Havigh (Presenter), Kitty Baert (Contributor), Annick Hubin (Contributor) & Herman Terryn (Contributor)  
23 May 2023

### **Study of the influence of the penetration between an aluminium electrode and a conductive polymer for better solid-state electrolytic capacitors**

Nestor Calabia Gascon (Speaker), Annick Hubin (Contributor) & Herman Terryn (Contributor)  
21 May 2023 → 25 May 2023

### **Fundamental Insights into Electrodeposition of Mixed Chromium Metal-Carbide-Oxides from Trivalent Chromium – Formate Electrolytes**

Maxine Ankora (Speaker), Mesfin Haile Mamme (Speaker), Koen Lammers (Contributor), Jacques Wijenberg (Contributor), Arnoud de Voys (Contributor), Herman Terryn (Speaker) & Arjan Mol (Speaker)  
9 Oct 2022 → 13 Oct 2022

### **Corrosion protection of galvanized steel by epoxy-amine coatings: An ORP-EIS investigation**

Vanina Cristaudo (Speaker), Benny Wouters (Contributor), Raf Claessens (Contributor), Negin Madelat (Contributor), Kitty Baert (Contributor), Priya Laha (Contributor), Mary Lyn Lim (Contributor), Lee Steely (Contributor), Balaji Kannan (Contributor), Elizabeth Brown-Tseng (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)  
28 Aug 2022 → 1 Sep 2022

**Unravelling the chemisorption mechanism of epoxy-amine coatings on Zr-based converted galvanized steel by a novel combination of XPS/ToF-SIMS approach and use of model substrates**

Vanina Cristaudo (Speaker), Kitty Baert (Contributor), Priya Laha (Contributor), Mary Lyn Lim (Contributor), Elizabeth Brown-Tseng (Contributor), Lee Steely (Contributor), Balaji Kannan (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

30 May 2022 → 3 Jun 2022

**Characterization of molecular interactions at the (buried) aluminium oxide - silane interface by ToF-SIMS, XPS and HAXPES**

Kristof Marcoen (Speaker), Beatriz de la Fuente (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

29 May 2022 → 3 Jun 2022

**Unraveling the formation mechanism of hybrid Zr conversion coating on advanced high strength stainless steels**

Mohaddese Nabizadeh (Speaker), Kristof Marcoen (Contributor), El Amine Mernissi Cherigui (Contributor), Thomas Kolberg (Contributor), Daniel Schatz (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Speaker)

29 May 2022 → 3 Jun 2022

**FEM modelling to predict water uptake and transport in organic coatings**

Mats Meeusen (Speaker), Herman Terryn (Contributor), Joost van Dam (Contributor), Negin Madelat (Contributor), Benny Wouters (Contributor), Tom Hauffman (Contributor), Guy Van Assche (Contributor), Ehsan Jalilian (Contributor), J.M.C. Mol (Contributor) & Annick Hubin (Contributor)

29 Mar 2022 → 1 Apr 2022

**Time-resolved monitoring of buried hybrid coating/metal oxide interfacial interactions using ORP-EIS combined with FTIR in Kretschmann geometry**

Negin Madelat (Speaker), Benny Wouters (Contributor), Ehsan Jalilian (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

13 Oct 2021 → 14 Oct 2021

**Modification of porous anodic layers on AA2024 clad by atomic layer deposition and its effect on coating adhesion and oxide stability.**

Mariana Paz Martinez-Viademonte (Speaker), Shoshan Abrahami (Contributor), Takahashi Yanagishita (Contributor), Meisam Dabiri Havigh (Contributor), Karsten Thiel (Contributor), Benny Wouters (Contributor), Theodor Hack (Contributor), Malte Burchardt (Contributor) & Herman Terryn (Contributor)

24 Sep 2021

**The effect of anodizing parameters on the oxide chemistry and oxide stability in harsh environments for AA2024 clad alloys.**

Mariana Paz Martinez-Viademonte (Speaker), Shoshan Abrahami (Contributor), Kristof Marcoen (Contributor), Meisam Dabiri Havigh (Contributor), Benny Wouters (Contributor), Theodor Hack (Contributor), Malte Burchardt (Contributor) & Herman Terryn (Contributor)

24 Sep 2021

**A combined XPS/ToF-SIMS approach for the evaluation of the interfacial interactions between Zr-based converted galvanized steel and epoxy coatings**

Vanina Cristaudo (Speaker), Kitty Baert (Contributor), Priya Laha (Contributor), Mary Lyn Lim (Contributor), Elizabeth Brown-Tseng (Contributor), Lee Steely (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

20 Sep 2021 → 24 Sep 2021

**In-depth analysis of the particular role of ions and water diffusion in organic coatings on metals: application of an integrated spectro-electrochemical ORP EIS-FTIR approach**

Negin Madelat (Speaker), Benny Wouters (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

20 Sep 2021 → 24 Sep 2021

**The comprehensive study of phosphating mechanism on Advanced High Strength Stainless Steels (AHSS)**

Mohaddese Nabizadeh (Speaker), El Amine Mernissi Cherigui (Contributor), Kristof Marcoen (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

20 Sep 2021 → 24 Sep 2021

**Monitoring initial ion and water uptake of organic coatings using time-resolved instantaneous electrochemical impedance spectroscopy**

Benny Wouters (Speaker), Ehsan Jalilian (Contributor), Negin Madelat (Contributor), Raf Claessens (Contributor), Guy Van Assche (Contributor), Tom Hauffman (Contributor), Herman Terryn (Contributor) & Annick Hubin (Contributor)  
30 Aug 2021

**Large substrate effect on the organic ion yields in SIMS analysis using Ar-GCIB**

Vanina Cristaudo (Invited speaker), Claude Poleunis (Contributor), Priya Laha (Contributor), Pierre Eloy (Contributor), Tom Hauffman (Contributor), Herman Terryn (Contributor) & Arnaud Delcorte (Contributor)  
23 Aug 2021 → 27 Aug 2021

**Application du ToF-SIMS à l'étude de la protection de la corrosion de l'acier galvanisé**

Vanina Cristaudo (Speaker), Kitty Baert (Contributor), Priya Laha (Contributor), Elizabeth Brown-Tseng (Contributor), Mary Lyn Lim (Contributor), Egle Puodziukynaite (Contributor), Silvia Bezer (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)  
25 Mar 2021

**Comparison of deposition mechanism of Silane/Zr thin film and Zinc phosphate conversion coating on MaX1.2HY, a newly developed group of stainless steel**

Mohaddese Nabizadeh (Speaker), C Boissy (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)  
7 Sep 2020

**Corrosion protection by organic coatings: onset of disbonding and delamination at the buried organic-inorganic interface**

Negin Madelat (Presenter), Negar Khayatan (Contributor), Benny Wouters (Contributor), Tom Hauffman (Contributor), Herman Terryn (Contributor) & Michael Rohwerder (Contributor)  
7 Sep 2020

**Molecular interaction characterisation of (buried) steel oxide - silane interfaces by ToF-SIMS using argon cluster ions for depth profiling**

Kristof Marcoen (Speaker), Mélanie Gauvin (Contributor), Joost De Strycker (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)  
7 Sep 2020 → 13 Sep 2020

**ToF-SIMS application in the study of the corrosion protection of the galvanized steel**

Vanina Cristaudo (Speaker), Kitty Baert (Contributor), Priya Laha (Contributor), Elizabeth Brown-Tseng (Contributor), Mary Lyn Lim (Contributor), Egle Puodziukynaite (Contributor), Silvia Bezer (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)  
7 Sep 2020 → 13 Sep 2020

**Identification of lateral water diffusion in organic coatings using time-resolved instantaneous electrochemical impedance spectroscopy**

Benny Wouters (Speaker), Negin Madelat (Contributor), Raf Claessens (Contributor), Ehsan Jalilian (Contributor), Guy Van Assche (Contributor), Tom Hauffman (Contributor), Herman Terryn (Contributor) & Annick Hubin (Contributor)  
3 Sep 2020

**Can Water be an Additive? - Towards the Understanding of the Water Content Effect on Ni and Cr Electrodeposition from Choline Chloride-Based Deep Eutectic Solvent**

Monika Lukaczynska-Anderson (Speaker), Mesfin Haile Mamme (Speaker), Van Den Bergh Krista (Speaker), Joost De Strycker (Speaker), Frank De Proft (Speaker), Herman Terryn (Speaker) & Jon Ustarroz Troyano (Speaker)  
10 May 2020 → 14 May 2020

**Smart corrosion inhibition and structural effect of lithium in PMMA-silica coatings**

Andressa Trentin (Speaker), Kristof Marcoen (Contributor), Samarah V. Harb (Contributor), Mayara C. Uvida (Contributor), Celso V. Santilli (Contributor), Herman Terryn (Contributor), Tom Hauffman (Contributor) & Peter Hammer (Contributor)  
23 Oct 2019 → 25 Oct 2019



**The use of ATR-FTIR in Kretschmann geometry to study the durability of adhesively bonded Al joints with different pre-treatments for automotive purposes**

Francesca Cavezza (Speaker), Sven Pletincx (Contributor), Shoshan Tamar Abrahami (Contributor), Boehm Matthieu (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

15 Sep 2019 → 20 Sep 2019

**Experimental validation of Dynamic Electrolyte Film Model for atmospheric corrosion modelling**

Koushik Bangalore Gangadharacharya (Contributor), Nils Van Den Steen (Speaker), Daan De Wilde (Contributor), Raf Claessens (Contributor), Herman Terryn (Contributor) & Darja Pecko (Contributor)

9 Sep 2019 → 13 Sep 2019

**Thin electrolyte thickness measurements for atmospheric corrosion modelling**

Koushik Bangalore Gangadharacharya (Speaker), Nils Van Den Steen (Contributor), Daan De Wilde (Contributor), Darja Pecko (Contributor), Raf Claessens (Contributor) & Herman Terryn (Contributor)

26 Aug 2019 → 28 Aug 2019

**Transport Through a Organic Model Coating**

Ehsan Jalilian (Speaker), Guy Van Assche (Contributor) & Herman Terryn (Contributor)

24 Jun 2019 → 28 Jun 2019

**MSynthesis and failure of hybrid organic – inorganic structures: a combined electrochemical – chemical analysis approach**

Tom Hauffman (Keynote speaker), Sven Pletincx (Speaker), Francesca Cavezza (Speaker), Herman Terryn (Speaker) & Annick Hubin (Speaker)

7 Apr 2019 → 10 Apr 2019

**In-situ monitoring of polymer/metal oxide interfaces under aqueous conditions**

Sven Pletincx (Speaker), L. I. Fockaert (Contributor), Mats Meeusen (Contributor), Johannes (Arjan) Mol (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)

2019

**Life-time prediction of organic coated metal oxide structures: establishing the importance of hybrid bonding and interfacial electrochemical reactions**

Tom Hauffman (Speaker), Sven Pletincx (Contributor), Francesca Cavezza (Contributor), Kristof Marcoen (Contributor), Laura Lynn I. Fockaert (Contributor), Mats Meeusen (Contributor), Shoshan Tamar Abrahami (Contributor), Johannes (Arjan) Mol (Contributor) & Herman Terryn (Contributor)

2019

**Prediction of durability and lifetime of the organic coated metals under long-term environmental corrosion**

Darja Pecko (Speaker), Daan De Wilde (Contributor), Nils Van Den Steen (Contributor), Tom Hauffman (Contributor), Guy Van Assche (Contributor), Ehsan Jalilian (Contributor), Michael Rohwerder (Contributor), Johan Deconinck (Contributor), Annick Hubin (Contributor) & Herman Terryn (Contributor)

2019

**Surface characterization of zinc phosphate automotive conversion on MAX1.2HY, a newly developed group of stainless steel**

Mohaddese Nabizadeh (Speaker), C Boissy (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

2019

**Synthesis and failure of hybrid organic-inorganic structures: a combined electrochemical – chemical analysis approach**

Tom Hauffman (Speaker), Francesca Cavezza (Contributor), Annick Hubin (Contributor), Sven Pletincx (Contributor) & Herman Terryn (Contributor)

2019

**The role of mechanical and chemical bonding mechanisms in adhesion of nanoporous anodic aluminium oxides**

Shoshan Tamar Abrahami (Speaker), V.C. Gudla (Contributor), Kristof Marcoen (Contributor), J De Kok (Contributor), Tom Hauffman (Contributor), Rajan Ambat (Contributor), Arjan J. M. C. Mol (Contributor) & Herman Terryn (Contributor)

2019

**The use of ATR-FTIR in a Kretschmann geometry to study the durability of adhesively bonded Al joints with different pre-treatments for automotive purposes**

Francesca Cavezza (Speaker), Sven Pletincx (Contributor), Shoshan Tamar Abrahami (Contributor), Mathieu Boehm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

2019

**Zinc phosphate automotive conversion of MAX1.2HY, a newly developed group of stainless steel**

Mohaddese Nabizadeh (Speaker), C Boissy (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

2019

**Chemical Interactions at Hybrid Interfaces: An In Situ Investigation of Organic/Inorganic Systems**

Sven Pletincx (Speaker), Laura Lynn I. Fockaert (Contributor), Mats Meeusen (Contributor), J.M.C. Mol (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

22 Oct 2018 → 26 Oct 2018

**Increasing the Retention Capacity of Porous Layered Radially Elongated Pillar Array Columns**

Shunta Futagami (Speaker), Takeshi Hara (Contributor), Prof. Dr. Ir. Heidi Ottevaere (Contributor), Herman Terryn (Contributor), Gino Baron (Contributor), Gert Desmet (Contributor) & Wim De Malsche (Contributor)

26 Sep 2018

**Growth mechanism of industrial Ti/Zr no-rinse sprayed conversion coating applied on automotive aluminium coils: preferential deposition on the IMP**

Pieter Bouckenooge (Speaker), Oliver Bauer (Contributor), Katrin Eckhard (Contributor), Hendrik-Jan Brinkman (Contributor) & Herman Terryn (Contributor)

25 Sep 2018

**Molecular interaction characterisation of buried organic-inorganic interfaces by ToF-SIMS using argon cluster ions for depth profiling combined with in-situ AFM**

Kristof Marcoen (Speaker), Mélanie Gauvin (Contributor), Nathalie Van Den Bossche (Contributor), Marie-Laure Abel (Contributor), John F. Watts (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

25 Sep 2018

**The In Situ Characterization of Chemical Interactions at Organic-Inorganic Interfaces**

Sven Pletincx (Speaker), Laura Lynn I. Fockaert (Contributor), Mats Meeusen (Contributor), J.M.C. Mol (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

25 Sep 2018

**Molecular interaction characterisation of buried organic-inorganic interfaces by ToF-SIMS using argon cluster ions for depth profiling combined with in-situ AFM**

Kristof Marcoen (Speaker), Mélanie Gauvin (Contributor), Nathalie Van Den Bossche (Contributor), Marie-Laure Abel (Contributor), John F. Watts (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

17 Sep 2018

**Extended lifespan and corrosion resistance of silica-PMMA hybrid coatings modified with cerium and lithium ions**

Andressa Trentin (Speaker), Kristof Marcoen (Contributor), Alexander Lutz (Contributor), Samarah V. Harb (Contributor), Herman Terryn (Contributor), Tom Hauffman (Contributor) & Peter Hammer (Contributor)

9 Sep 2018 → 13 Sep 2018

**AFM-IR: a novel technique to probe the chemical interaction between organic coatings and aluminium oxide.**

Francesca Cavezza (Speaker), Sven Pletincx (Contributor), Matthieu Boehm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

20 Aug 2018 → 24 Aug 2018

**Increased durability and corrosion protection of PMMA-siloxane hybrid coatings modified with cerium and lithium**  
Andressa Trentin (Speaker), Samarah V. Harb (Contributor), Celso V. Santilli (Contributor), Tom Hauffman (Contributor), Herman Terry (Contributor) & Peter Hammer (Contributor)  
26 Jun 2018 → 29 Jun 2018

**Growth mechanism of industrial Ti/Zr no-rinse sprayed conversion coating applied on automotive aluminium coils: preferential deposition on the intermetallic phases**  
Pieter Bouckenooghe (Speaker), Herman Terry (Contributor), Oliver Bauer (Contributor), Katrin Eckhard (Contributor) & Hendrik-Jan Brinkman (Contributor)  
28 May 2018

**Probing the chemical interaction between organophosphorus based conversion coatings and aluminium oxide on a nanoscale level using AFM-IR**  
Francesca Cavezza (Speaker), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Matthieu Boehm (Contributor), Herman Terry (Contributor) & Tom Hauffman (Contributor)  
27 May 2018 → 31 May 2018

**XPS as the Core Tool for the Characterization of Chemical Interactions at Organic/Inorganic Interfaces**  
Sven Pletincx (Speaker), Herman Terry (Speaker) & Tom Hauffman (Speaker)  
17 May 2018

**Bonding and failure at hybrid interfaces**  
Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Francesca Cavezza (Contributor), Shoshan Tamar Abrahami (Contributor), Peyman Taheri (Contributor), Arjan J. M. C. Mol (Contributor), Herman Terry (Contributor) & Tom Hauffman (Keynote speaker)  
2018

**Cr(VI)-free anodizing for adhesive bonding applications**  
Shoshan Tamar Abrahami (Speaker), Kristof Marcoen (Contributor), Tom Hauffman (Contributor), J.M.M. de Kok (Contributor), V.C. Gudla (Contributor), Rajan Ambat (Contributor), Herman Terry (Contributor) & Arjan J. M. C. Mol (Contributor)  
2018

**Extended lifespan and corrosion resistance of silica-PMMA hybrid coatings modified with cerium and lithium ions**  
Andressa Trentin (Speaker), S Harb (Contributor), Kristof Marcoen (Contributor), Alexander Lutz (Contributor), Herman Terry (Contributor), Tom Hauffman (Contributor) & Peter Hammer (Contributor)  
2018

**In situ pathways to characterize buried interfaces of organic/inorganic hybrid metal corrosion protection systems under different exposure conditions**  
Herman Terry (Contributor), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Peyman Taheri (Contributor), Francesca Cavezza (Contributor), L. I. Fockaert (Contributor), Arjan J. M. C. Mol (Contributor) & Tom Hauffman (Contributor)  
2018

**Knowledge and technology platform for prediction of durability and lifetime of organic coated metals under long-term environmental corrosion**  
Darja Pecko (Speaker), Daan De Wilde (Contributor), Annick Hubin (Contributor), Tom Hauffman (Contributor), Guy Van Assche (Contributor), Nils Van Den Steen (Contributor), Hans Simillion (Contributor), Michael Rohwerder (Contributor), Johan Deconinck (Contributor) & Herman Terry (Contributor)  
2018

**Nano-scale hybrid structure molecular analysis**  
Tom Hauffman (Invited speaker), Francesca Cavezza (Contributor), Sven Pletincx (Contributor), Alexander John Cruz (Contributor), J Waeytjens (Contributor), R Ameloot (Contributor) & Herman Terry (Contributor)  
2018

**Novel pathways in reaching buried interfaces of organic/inorganic hybrid systems: a mechanistic understanding of polymer adsorption on passivated metal oxide surfaces**

Tom Hauffman (Speaker), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Francesca Cavezza (Contributor), L. I. Fockaert (Contributor), Arjan J. M. C. Mol (Contributor) & Herman Terryn (Contributor)  
2018

**Probing the chemical interaction between organophosphorous based conversion coatings and aluminium oxide on a nanoscale level using AFM-IR**

Herman Terryn (Speaker), Francesca Cavezza (Contributor), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Mathieu Boehm (Contributor) & Tom Hauffman (Contributor)  
2018

**Unravelling the two fundamental adhesion mechanisms of nanoporous anodic aluminium oxides (AAO) with epoxy**

Shoshan Tamar Abrahami (Speaker), John de Kok (Contributor), V.C. Gudla (Contributor), Kristof Marcoen (Contributor), Tom Hauffman (Contributor), Rajan Ambat (Contributor), Arjan J. M. C. Mol (Contributor) & Herman Terryn (Contributor)  
2018

**The effect of humidity on chemical interactions at hybrid interfaces: an in situ investigation of polymer / metal oxide bonds**

Sven Pletincx (Speaker), Lena Trotochaud (Contributor), Laura Lynn I. Fockaert (Contributor), Ashley R Head (Contributor), Osman Karsloğlu (Contributor), J.M.C. Mol (Contributor), Hendrik Bluhm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)  
29 Oct 2017 → 3 Nov 2017

**The effect of water on chemical interactions at the interface of ultrathin polymeric films and aluminium oxide by in situ characterization**

Sven Pletincx (Speaker), Lena Trotochaud (Contributor), Laura Lynn I. Fockaert (Contributor), J.M.C. Mol (Contributor), Hendrik Bluhm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)  
24 Sep 2017 → 29 Sep 2017

**The use of FE-AES and FE-SEM to characterise the sub-micrometre distribution of a Zr-Ti no-rinse conversion coating applied on automotive aluminium coils**

Pieter Bouckenooghe (Speaker), Oliver Bauer (Contributor), Katrin Eckhard (Contributor), Hendrik-Jan Brinkman (Contributor) & Herman Terryn (Contributor)  
24 Sep 2017 → 29 Sep 2017

**Probing chemical interactions at polymer / metal oxide interfaces by novel surface analysis techniques**

Sven Pletincx (Speaker), Francesca Cavezza (Contributor), Laura Lynn I. Fockaert (Contributor), J.M.C. Mol (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)  
13 Sep 2017 → 14 Oct 2017

**A study of the interface between polymeric methylene diphenyl diisocyanate and metal surfaces by ToF-SIMS and MVA**

J.B. Ciscar (Speaker), Marie-Laure Abel (Contributor), Kristof Marcoen (Contributor), Tom Hauffman (Contributor), Herman Terryn (Contributor), Thierry Conard (Contributor) & John F. Watts (Contributor)  
2017

**Compositional study of a corrosion protective layer formed by leachable lithium salts in a coating defect on AA2024-T3 aluminium alloys**

Kristof Marcoen (Speaker), Peter Visser (Contributor), Marie-Laure Abel (Contributor), John F. Watts (Contributor), Johannes (Arjan) Mol (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)  
2017

**Novel pathways in reaching buried interfaces of organic / inorganic hybrid systems: a mechanistic understanding of polymer adsorption on passivated metal oxide surfaces**

Tom Hauffman (Speaker), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Francesca Cavezza (Contributor) & Herman Terryn (Contributor)  
2017

**Probing chemical interactions between organic conversion coatings and aluminium oxide: an AFM-IR approach**

Francesca Cavezza (Speaker), Sven Pletincx (Contributor), Mathieu Boehm (Contributor), Tom Hauffman (Contributor) & Herman Terryn (Contributor)

2017

**Probing chemical interactions between organic conversion coatings and aluminium oxide with high lateral resolution: an AFM-IR approach**

Francesca Cavezza (Speaker), Sven Pletincx (Contributor), Mathieu Boehm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

2017

**Surface properties and interfacial bonding of aluminium oxides and organic resins**

Shoshan Tamar Abrahami (Speaker), Tom Hauffman (Contributor), J.M.M. de Kok (Contributor), V.C. Gudla (Contributor), Rajan Ambat (Contributor), Arjan J. M. C. Mol (Contributor) & Herman Terryn (Contributor)

2017

**Surface properties and interfacial bonding of anodic aluminium oxides and organic resins**

Shoshan Tamar Abrahami (Speaker), Tom Hauffman (Contributor), J.M.M. de Kok (Contributor), V.C. Gudla (Contributor), Rajan Ambat (Contributor), Johannes M. C. Mol (Contributor) & Herman Terryn (Contributor)

2017

**In Situ Characterization of the Initial Effect of Water on Molecular Interactions at the Interface of Organic/Inorganic Hybrid Systems**

Sven Pletincx (Speaker), Lena Trotochaud (Contributor), Laura Lynn I. Fockaert (Contributor), J.M.C. Mol (Contributor), Hendrik Bluhm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

12 Dec 2016 → 16 Dec 2016

**Operando investigation of chemical bonding at hybrid interfaces: the effect of humidity on polymer/metal oxide bonds**

Sven Pletincx (Speaker), Lena Trotochaud (Contributor), Ashley R Head (Contributor), Osman Karslıoğlu (Contributor), L. I. Fockaert (Contributor), J.M.C. Mol (Contributor), Hendrik Bluhm (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)

6 Nov 2016 → 11 Nov 2016

**On the importance of the "chemical" interface between organic coatings and metals**

Tom Hauffman (Speaker), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), P. Kerger (Contributor), Laura Lynn I. Fockaert (Contributor), M. Rohwerder (Contributor), Johannes M. C. Mol (Contributor) & Herman Terryn (Contributor)

24 Oct 2016 → 26 Oct 2016

**Cr(VI)-free Aluminium Pre-treatment for aerospace structural adhesive bonding: different aspects of adhesion**

Shoshan Tamar Abrahami (Speaker), J.M.M. de Kok (Contributor), Tom Hauffman (Contributor), V.C. Gudla (Contributor), Rajan Ambat (Contributor), Herman Terryn (Contributor) & Johannes M. C. Mol (Contributor)

2016

**Cr(VI)-free anodizing for structural adhesive bonding in the aerospace industry**

Shoshan Tamar Abrahami (Speaker), J.M.M. de Kok (Contributor), V.C. Gudla (Contributor), Tom Hauffman (Contributor), Rajan Ambat (Contributor), Herman Terryn (Contributor) & Johannes M. C. Mol (Contributor)

2016

**Interfaces in hybrid structures: a non-destructive, in situ insight in bonds and failure**

Tom Hauffman (Speaker), Sven Pletincx (Contributor), L. I. Fockaert (Contributor), M. Sababi (Contributor), Shoshan Tamar Abrahami (Contributor), P. Kerger (Contributor), Peyman Taheri (Contributor), Michael Rohwerder (Contributor), Johannes M. C. Mol (Contributor) & Herman Terryn (Contributor)

2016

**On the importance of the "chemical" interface between organic coatings and metals**

Herman Terryn (Speaker), Tom Hauffman (Contributor), Sven Pletincx (Contributor), Kristof Marcoen (Contributor), Shoshan Tamar Abrahami (Contributor), L. I. Fockaert (Contributor), Nandi Vrancken (Contributor) & Johannes M. C. Mol (Contributor)

2016

**Towards the chemical characterisation of buried hybrid organic-inorganic interfaces by high mass resolution ToF-SIMS**  
Kristof Marcoen (Speaker), J. Bañuls-Ciscar (Contributor), Marie-Laure Abel (Contributor), Jan Scheers (Contributor), John F. Watts (Contributor), Herman Terryn (Contributor) & Tom Hauffman (Contributor)  
2016

**Probing the interface between ultrathin polymeric films and Aluminum oxide: in-situ investigation of the electrolyte diffusion throughout the coating**  
Sven Pletincx (Speaker), Tom Hauffman (Contributor) & Herman Terryn (Contributor)  
28 Sep 2015 → 1 Oct 2015

**Fundamental analysis of the surface chemistry of untreated 316L stainless steel microfibers**  
Tom Hauffman (Speaker), Amandine Crabbe (Contributor), Dhanya Ramachandran (Contributor), Ricardo Egoavil (Contributor), J Verbeeck (Contributor), Isabelle Vandendael (Contributor), Dominique Schryvers (Contributor) & Herman Terryn (Contributor)  
2015

**SIM Inauguration Day of the Local Electrochemical Lab**  
Herman Terryn (Organiser)  
9 May 2012

**Third International Conference on self-healing materials, June 27-29 (2011), Bath, UK.**  
Herman Terryn (Participant)  
27 Jun 2011 → 29 Jun 2011

**Unknown (External organisation)**  
Herman Terryn (Member)  
Feb 2011 → ...

**Electrochemical evaluation of a shape-memory coating as a self-healing system for corrosion protection of metals (Journal)**  
Herman Terryn (Editor)  
2011

**Local electrochemical evaluation of a shape-memory coating as a self-healing system for corrosion protection of metals (Journal)**  
Herman Terryn (Editor)  
2011

**University of Lisbon (External organisation)**  
Herman Terryn (Member)  
2010 → ...

**Unknown (External organisation)**  
Herman Terryn (Member)  
1 Jan 2008 → 31 Dec 2011

**International Workshop Application of Electrochemical Techniques to Organic Coatings**  
Herman Terryn (Keynote speaker)  
18 Apr 2007 → 21 Apr 2007

**International Workshop Application of Electrochemical Techniques to Organic Coatings**  
Herman Terryn (Keynote speaker)  
18 Apr 2007 → 21 Apr 2007

**Innovative pre-treatment techniques to prevent corrosion of metallic surfaces (Journal)**

Herman Terryn (Editor)  
2007

**International Workshop on "Future Perspectives of Corrosion Research"**

Herman Terryn (Keynote speaker)  
13 Dec 2006 → 16 Dec 2006

**3rd International Workshop on Particle-induced reactions and interactions at surfaces**

Herman Terryn (Keynote speaker)  
10 Nov 2006 → 11 Nov 2006

**Aluminium Surface Modification**

Herman Terryn (Keynote speaker)  
8 Nov 2006

**Gordon Conference on Aqueous Corrosion**

Herman Terryn (Keynote speaker)  
16 Jul 2006 → 21 Jul 2006

**4th International Symposium on Aluminium Surface Science and Technology**

Herman Terryn (Speaker)  
14 May 2006 → 18 May 2006

**Nanostructured metal oxides: synthesis and applications. Final symposium of the IWT project GBOU 010059,**

Herman Terryn (Speaker)  
28 Apr 2006

**IRDG Nederland**

Herman Terryn (Keynote speaker)  
20 Apr 2006

**Séminaire PCPM, Louvain-La-Neuve, Belgium Unité de Physico-Chimie et de Physique des Matériaux (PCPM) Université catholique de Louvain (UCL)**

Herman Terryn (Speaker)  
9 Mar 2006

**16th International Corrosion Congress**

Herman Terryn (Speaker)  
19 Sep 2005 → 24 Sep 2005

**Light metal surface science annual conference**

Herman Terryn (Keynote speaker)  
15 Jun 2005 → 16 Jun 2005

**Surface technology days at the MPI for iron research, 'Applied surface and interface analysis for thin film coated metals'**

Herman Terryn (Organiser)  
1 Dec 2004 → 2 Dec 2004

**Surface technology days at the MPI for iron research, 'Applied surface and interface analysis for thin film coated metals'**

Herman Terryn (Keynote speaker)  
1 Dec 2004 → 2 Dec 2004

**Eurocorr 2004, 'Long term prediction & modelling of corrosion'**

Herman Terry (Speaker)  
12 Sep 2004 → 16 Sep 2004

**Eurocorr 2004, 'Long term prediction & modelling of corrosion'**

Herman Terry (Keynote speaker)  
12 Sep 2004 → 16 Sep 2004

**ICEPAM 2004, 'International Conference on Environmental friendly Pre-treatments for Aluminium and other Metals'**

Herman Terry (Speaker)  
16 Jun 2004 → 18 Jun 2004

**Anodisation in the aircraft manufacturing industry**

Herman Terry (Keynote speaker)  
14 Apr 2004 → 15 Apr 2004

**Infrared and Raman Users Group, 6th international Conference**

Herman Terry (Keynote speaker)  
14 Apr 2004 → 15 Apr 2004

**Conference Corrosion NACE**

Herman Terry (Keynote speaker)  
28 Mar 2004 → 1 Apr 2004

**Light Metal Surface Science Annual Conference**

Herman Terry (Speaker)  
22 Jan 2004 → 23 Jan 2004

**Aluminium Surface Science and Technology (ASST 2003) Proceedings of the 3rd International Symposium (Journal)**

Herman Terry (Editor)  
2004

**Unknown (External organisation)**

Herman Terry (Member)  
2004 → 2008

**"Aluminium Surface Science and Technology (ASST 2000) Proceedings of the 2nd International Symposium" (Journal)**

Herman Terry (Editor)  
2001

**"Aluminium Surface Science and Technology (ASST 1997) Proceedings of the International Symposium" (Journal)**

Herman Terry (Editor)  
1998

**Hoogovens Aluminium N.V. (External organisation)**

Herman Terry (Member)  
16 Jul 1997 → 15 Jan 1998

**Unknown (External organisation)**

Herman Terry (Member)  
1 Oct 1995 → 30 Sep 1997



**Unknown (External organisation)**

Herman Terryn (Member)

1 Jan 1970 → ...