

Proceedings for the 14th European Powder Diffraction Conference published online as a 2015 Special Supplement Issue of Powder Diffraction Journal

European Powder Diffraction Conference (EPDIC 14) was held in Aarhus, Denmark on 15–18 June 2014. A beautiful city, pleasant weather, and an outstanding conference all made for a wonderful experience. As part of EPDIC 14, the International Centre for Diffraction Data (ICDD) sponsored the publication of the conference proceedings. Through Cambridge University Press, the EPDIC 14 proceedings with 21 papers (see [Table I](#)) are being published online (<http://journals.cambridge.org/action/displayJournal?jid=PDJ>).

EPDIC 14 attendees receive free access to the proceedings for 2 years and subscribers to Powder Diffraction also have access. Anyone without a PDJ subscription or did not attend

EPDIC 14 can purchase any of the articles for a fee. I would like to thank the EPDIC 14 Proceedings Editors Jens-Erik Jorgensen, Paolo Scardi, and Michela Brunelli for their efforts in getting all of the papers together, reviewed, and approved for publication. A special thanks to Nicole Ernst-Boris, Powder Diffraction Managing Editor, for her diligence in coordinating the submission of manuscripts to Cambridge University Press ([Photo 1](#)).

Tom Blanton

International Centre for Diffraction Data



Photo 1. (Color online) A highlight of the EPDIC 14 meeting was the presentation by the EPDIC Committee, the EPDIC Award for Distinguished Powder Diffractionists to Professor Daniel Louer (Rennes, France). Professor Louer is also an ICDD Distinguished Fellow. Shown here are Daniel (middle) being congratulated by ICDD Principal Scientist Tom Blanton (left) and ICDD Executive Director Tim Fawcett (right).

TABLE I. Published papers in EPDIC 14 proceedings.

Manuscript title	Authors	Manuscript title	Authors
Total scattering experiments on glass and crystalline materials at the ESRF on the ID11 Beamline	Bernasconi, Andrea; Wright, Jonathan; Harker, Nicholas	A comparison of total scattering data from various sources: the case of a nanometric spinel	Confalonieri, Giorgia; Dapiaggi, Monica; Sommariva, Marco; Gateshki, Milen; Fitch, Andy; Bernasconi, Andrea
Mechanism and kinetics of early transition metal hydrides, oxides and chlorides to enhance hydrogen release and uptake properties of MgH ₂	Korablov, Dmytro; Nielsen, Thomas; Besenbacher, Flemming; Jensen, Torben	The water retention mechanism of a Cs ⁺ and Na ⁺ exchanged montmorillonite: effect of relative humidity and ionic radius	Ammar, Marwa; Oueslati, Walid; Chorfi, Nejmeddine; Amara, Abdesslem
Thin film morphologies of block copolymers with nanoparticles	Jehnichen, Dieter; Pospiech, Doris; Friedel, Peter; He, Guping; Sepe, Alessandro; Zhang, Jianqi; Papadakis, Christine; Taurino, Rosa; Perlich, Jan	Stress-induced phase transformations in thermally cycled superelastic NiTi alloys: <i>in situ</i> X-ray diffraction studies.	Polatidis, Efthymios; Zotov, Nikolay; Mittemeijer, Eric
Trace phase detection and strain characterization from serial XFEL crystallography of a Pr _{0.5} Ca _{0.5} MnO ₃ Powder	Beyerlein, Kenneth; Jooss, Christian; Barty, Anton; Bean, Richard; Boutet, Sébastien; Dhesi, Sarnjeet; Doak, R. Bruce; Först, Michael; Galli, Lorenzo; Kirian, Richard; Kozak, Joseph; Lang, Michael	Study of residual stresses, microstructure and hardness in FeB and Fe ₂ B ultra-hard layers	Pala, Zdenek; Fojtikova, Jaroslava; Koubsky, Tomas; Musalek, Radek; Strasky, Josef; Capek, Jiri; Kyncl, Jiri; Beranek, Libor; Kolarik, Kamil
Nanocrystalline and stacking-disordered β -cristobalite AlPO ₄ – the now deciphered main constituent of a municipal sewage sludge ash from a full-scale incineration facility	Peplinski, Burkhard; Adam, Christian; Adamczyk, Burkart; Müller, Ralf; Michaelis, Matthias; Krahl, Thoralf; Emmerling, Franziska	Corrugations of the basal planes in hexagonal boron nitride and their impact on the phase transition to cubic boron nitride	Schimpf, Christian; Schwarz, Marcus; Lathe, Christian; Kroke, Edwin; Rafaja, David
Using synergy of experimental and computational techniques to solve monomer-trimer dilemma	Sisak Jung, Dubravka; Jović, Ozren; Kalinovičić, Petra; Primožič, Ines; Hrenar, Tomica	Ferromagnetic ordering in La _{0.7} Sr _{0.3} Mn ₃ + 0.85Nb ₅ + 0.15O ₃ manganite	Troyanchuk, Igor; Bushinsky, Maxim; Efimov, Vadim; Schorr, Susan; Ritter, Clemens; Sikolenko, Vadim
New type of versatile neutron diffractometer with a double-crystal (DC) monochromator system	Mikula, Pavol	Crystal structure of new phosphates Ca _{9x} Pb _x Eu(PO ₄) ₇ from Rietveld refinement	Deyneko, Dina; Stefanovich, Sergey; Lazoryak, Bogdan
Toward a reference material for line profile analysis	Troian, Andrea; Rebuffi, Luca; Leoni, Matteo; Scardi, Paolo	Temperature dependence of the inversion degree in three-cation spinel solid solutions experimental evaluation by XRD	Podwórny, Jacek
Analysis of preferential orientation in zirconium samples deformed by uniaxial tension using neutron and X-ray diffraction	Kucerakova, Monika	Quantification of stacking disordered Si-Al layer silicates by the Rietveld method: application to exploration for high-sulphidation epithermal gold deposits	Ufer, Kristian; Kleeberg, Reinhard; Monecke, Thomas
Design and management of a powder diffraction beamline for Line Profile Analysis: a realistic ray-tracing approach	Rebuffi, Luca; Scardi, Paolo; Sanchez del Rio, Manuel	Size and spatial correlation of defective domains in Yttrium-Doped CeO ₂	Checchia, Stefano; Scavini, Marco; Allieta, Mattia; Brunelli, Michela; Ferrero, Claudio; Coduri, Mauro
		Characterization of hydrochlorothiazide in solid formulations	Salvi, Simone; Tita, Diego; Paiva-Santos, Carlos; Antonio, Selma