



Netherlands Ceramic Society

Nederlandse Keramische Vereniging

Symposium “Advanced Ceramic Manufacturing in the Benelux”

On **Friday 25 October 2024**, the Netherlands Ceramic Society (NKV) and our Belgian sister organization Belgian Ceramic Society (BCerS) assisted by the Young Ceramists Network (YCN) organize this one-day symposium at TU Eindhoven to which you are kindly invited to participate.

Several oral presentations are planned, while ample time will be scheduled for **networking, poster and table top presentations**. (see also [NKV website](#))

Program:

- 10:00 Registration coffee, tea
- 10:40-10:50 **Diletta Giuntini**, Department of Mechanical Engineering, TU/e: Welcome plus *“Advanced ceramics research at TU/e”*
- 10:50-11:10 **Ozge Akbulut**, Sabanci University, Turkiye, *“Self-standing SiAlON doughs facilitate low-volume production through green machining”*
- 11:10-11:25 **Tim Herrmann**, WZR ceramic solutions GmbH, Germany, *“Overview of different additive manufacturing processes at WZR”*
- 11:25-11:40 **Pablo Gonzalez**, CoorsTek EMEA, *“Advanced Manufacturing of Near-Net shape Ceramic Products”*
- 11:40-11:55 **Firat Altınbaş**, University of Twente, Inorganic Membranes, *“Grafting ceramic supports for creating hydrophobic surfaces”*
- 11:55-12:10 **Harpreet Sondhi**, University of Twente, Inorganic Membranes, *“Molecular Layer Deposition Modified Pore Size and Hydrophobicity of Ceramic Membranes for Nanofiltration”*
- 12:10-13:30 **Lunch / posters / table top presentations**
- 13:30-13:45 **Farid Salari**, Concr3de, Introduction to YCN plus *“Optimizing of binder jetting 3D printing process parameters in materials produced without tooling”*
- 13:45-14:05 **Nicolas Somers**, ULiège, *“GREENMat (ULiège): Your Academic Partner for Applied Research on Materials for Energy, Environment & Health Applications”*
- 14:05-14:20 **Zhenhong Xue**, Surface and Interface Engineered Materials (SIEM), KU Leuven, *“Template-free and Size-controlled Synthesis of Rod-like Zirconia via Co-solvent Systems”*
- 14:20-14:35 **Enrique Juste**, BCRC (Belgian Ceramic Research Centre) Mons, *“Additive manufacturing of ceramics by Binder Jetting and PAM: towards a hybrid approach”*
- 14:35-15:00 **Coffee/tea break, posters/table-top presentations**
- 15:00-15:15 **Omid Hajishirmohammadi**, 4 OMID BV, *“Ceramic CATs: Opening New Market Opportunities in Sustainable Construction”*
- 15:15-15:35 **Berfu Göksel**, Faculty of Engineering Science, KU Leuven, *“Additive Manufacturing of Multimaterial ATZ and 3Y-TZP Parts for Implant Applications”*
- 15:35-15:50 **Zerafet ten Wolde**, Z3DLabs, *“From mm to micron: 3D-printing innovations with advanced ceramics”*
- 15:50-16:05 **Nienke de Roode**, Access2bone, *“Solution for long bone non-unions: Looking for structural support for our active ingredient”*
- 16:05-... **Lab tour plus subsequent drinks/snacks/networking**

Table top presentations:

- Anton Paar, Breda (NL)
- Benelux Scientific, Ede (NL)
- Schaeffler Aerosint, Herstal (B)
- SKF Research and Technology Development, Houten (NL)

Poster presentations:

- **Jiongjie Liu, Anne C.A.M. Timmermans, Diletta Giuntini** (Department of Mechanical Engineering, TU/e), "*Additive manufacturing of polymer-derived ceramics with multiscale architectures*"
- **Cong Yan** (TU/e), "*Mechanical characterization of ceramic-organic supercrystalline nanocomposites by nanoindentation*"
- **Darya Farrokhnemoun, Jozef Vleugels, Bart Van Meerbeek, Annabel Braem**, KU Leuven, "*Optimizing UV-assisted direct ink writing for ceria-stabilized zirconia ceramics in dental restorations*"
- **Mathieu Chabanel, Sooraj Shiby, Balasubramanian Nagarajan, Sylvie Castagne** (Department of Mechanical Engineering, KU Leuven), "*Studying the effect of temporal energy deposition of fs laser pulse for crack-free machining of ceramics*"
- **Anne Timmermans** (Department of Mechanical Engineering, TU/e), "*Experimental and numerical analysis of the sintering behavior of multi-layer membranes*"
- **Muthusundar Kumar** (Laboratory of Polymeric and Composite Materials, University of Mons), "*Low-temperature breakthrough: Progressing the consolidation of hydroxyapatite and polymer composites through cold sintering*"
- **Harpreet Sondhi** (Inorganic Membranes, University of Twente), "*Tailoring pore size and surface hydrophobicity in ceramic membranes: The case of MLD-grown titanicon layers*"
- **Firat Altınbaş, Arian Nijmeijer, Jurriaan Huskens, Mieke Luiten-Olieman, Marie-Alix Pizzoccaro-Zilamy** (Inorganic Membranes, University of Twente), "*Design of macroporous hydrophobic ceramic membranes for water desalination applications*"

Location:

Eindhoven University of Technology (TU/e www.tue.nl), building: [Gemini South](#) (Room 4.24)

Registration fee:

Members of the European Ceramic Society (ECerS): 50 euros (Members of a national ceramic society affiliated to ECerS, like NKV and BCerS, are automatically ECerS member).

Non-ECerS members: 65 euros.

How to register:

You can register - preferably instantly, but on Monday October 21 at the latest - by sending an e-mail to info@ceramics.nl titled 'Advanced Ceramic Manufacturing in the Benelux - October 25' and state your name and possibly the organisation/company that you represent.

You pay your symposium fee at the same time as your registration via bank account number:

NL10 INGB 0001 8560 32 (BIC code: **INGBNL2A**) of 'Nederlandse Keramische Vereniging', mentioning your name, company and 'NKV-BCerS October 2024'.

Kind regards,

On behalf of the organising committee, Eddy Brinkman & Louis Winnubst (both NKV), Diletta Giuntini & Tommaso Magrini (both NKV and TU/e), Farid Salari (NKV & YCN) and Nicolas Somers (BCerS).

