

Candidate application to the ISGS Board of Directors

Prof. Dr. Nicola Hüsing

Age:

53

Affiliation:

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 Chemistry and Physics of Materials

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CV with main research interests (no longer than 1/2 page)

1997	PhD (Dr. rer. nat.) "Organofunctional Silica Aerogels"
1996	DAAD HSP/II/Aufe Fellowship; Allosteric regulation of enzymes in silica gels, Prof. Dr. J.I. Zink at University of California, Los Angeles (UCLA), USA
1997	Harry Kloepfer-Aerosil Award of the GDCh, sponsored by Degussa AG
1997-1998	Erwin Schroedinger Fellowship, FWF; Nanostructured thin films, Prof. Dr. C.J. Brinker, Sandia National Laboratories and University of New Mexico, Albuquerque, USA
2003	Venia Legendi for Materials Chemistry, Vienna University of Technology (Habilitation): "Mesoscopically Organized Porous Thin Films and Monoliths – Synthesis and Modification"
2003-2004	Assistant Professor, Vienna University of Technology
2004-2010	Full Professor and Head of the Department Inorganic Chemistry I, Ulm University, Germany
2005	Donald-Ulrich Award of the ISGS
2010-now	Full Professor and Head of the Department "Chemistry and Physics of Materials", Paris Lodron University Salzburg, Austria
2015-now	Full Member of the Austrian Academy of Sciences (ÖAW)
2018-now	Member of the European Academy of Sciences (EURACS)
2019-now	Vice rector for Research and Sustainability at Paris Lodron University of Salzburg

My research is focusing on the design of highly porous and high surface area materials (inorganic or hybrids) by tailor-made precursors for a variety of applications. Starting from molecular precursors in the liquid phase, sol-gel processes combined with self-organization processes leading to nanostructured particles, powders, monolithic (bulk) materials and thin films are investigated. Recently, sustainable processes such as biogenic precursors (e.g. tannins) and water as the solvent became more and more important.

5 representative publications

A facile one-pot synthesis towards hierarchically organized Carbon/TiO₂ monoliths with ordered mesopores, J. Schoiber, C. Koczwar, S. Rumswinkel, L. Whitmore, C. Prehal, F. Putz, M.S. Elsaesser, O. Paris, N. Hüsing, *ChemPlusChem.*, **2021**, *86*, 275-283. DOI: 10.1002/cplu.202000740

A Systematic Study on Bio-Based Hybrid Aerogels Made of Tannin and Silica, A.-K. Koopmann, W. Malfait, T. Sepperer, N. Huesing, *Materials* **2021**, *14*, 5231. <https://doi.org/10.3390/ma14185231>

3D Printing of Hierarchical Porous Silica and α -Quartz, F. Putz, S. Scherer, M. Ober, R. Morak, O. Paris, N. Hüsing, *Adv. Mater. Technol.* 2018; **3**: 1800060. 10.1002/admt.201800060

Sol-gel synthesis of monolithic materials with hierarchical porosity, A. Feinle, M.E. Elsässer, N. Hüsing, *Chem. Soc. Rev.* **2016**, *45*, 3377-3399. DOI:10.1039/c5cs00710k

Glycol-modified silanes in the synthesis of nanostructured monolithic silica, N. Hüsing, D. Brandhuber, V. Torma, C. Raab, H. Peterlik, *Chem. Mater.* **2005**, *17*, 4262-4271. 10.1021/cm048483j

Statement of interest

With this statement I would like to express my interest in joining the ISGS Board of Directors.

Working on sol-gel chemistry and aerogels, I have been a member of the sol-gel community for over 25 years and me and my research group have always profited from the many activities (summer schools, workshops, prizes, etc.) and benefits ISGS is providing.

I am confident that I not only have a strong background in sol-gel chemistry with a high commitment to serve the community, but also provide a strong experience in various leadership positions that prepared me well for a position in the board of directors.