

Jan J. Wiesfeld

Postdoctoral Fellow

Catalysis Research Center, Hokkaido University

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Education

2009 Zuyd University of Applied Sciences, Heerlen, The Netherlands

BSc. (Supervisor: Ir. R. Bastiaens)

2014 Eindhoven University of Technology, Eindhoven, The Netherlands

Ir. (Supervisors: Prof. Dr. Egbert W. Meijer & Dr. Stanislav J. Presolski)

2019 Eindhoven University of Technology, Eindhoven, The Netherlands

Dr. (Supervisors: Prof. Dr. Ir. Emiel J. M. Hensen & Prof. Dr. Kiyotaka Nakajima)

Thesis title: Earth-abundant Heterogeneous Catalysts for the Conversion of Biomass into Value-added Chemical Intermediates

Professional career

2020-present Postdoctoral Fellow, Catalysis Research Center, Hokkaido University

List of publications

- F.J.A.G. Coumans, Z. Overchenko, **J.J. Wiesfeld**, N. Kosinov, K. Nakajima, E.J.M Hensen, Protection Strategies for the Conversion of Biobased Furanics to Chemical Building Blocks, *ACS Sustainable Chem. Eng.* **2022**, Early Access
- T. Boonyakarn, **J.J. Wiesfeld**, M. Asakawa, L. Chen, A. Fukuoka, E.J.M. Hensen, K. Nakajima, Effective Oxidation of 5-Hydroxymethylfurfural to 2,5-Diformylfuran by an Acetal Protection Strategy, *ChemSusChem*, **2022**, Early Access
- Miyoshi, K. Kato, T. Yokoi, **J.J. Wiesfeld**, K. Nakajima, A. Yamakata, K. Maeda, Nano vs. bulk rutile TiO₂:N,F in Z-scheme overall water splitting under visible light, *J. Mater. Chem. A*, **2020**, *8*, 11996-12002

- **J.J. Wiesfeld**, M. Kim, K. Nakajima, E.J.M. Hensen, Selective hydrogenation of 5-hydroxymethylfurfural and its acetal with 1,3-propanediol to 2,5-bis(hydroxymethyl)furan using supported rhenium-promoted nickel catalysts in water, *Green Chem.*, **2020**, *22*, 1229-1238
- **J.J. Wiesfeld**, E.J.M. Hensen, K. Nakajima, Catalytic Conversion of Lignocellulosic Biomass: Application of Heterogeneous and Homogeneous Catalysts to Process Biomass into Value-Added Compounds *in* Advanced Heterogeneous Catalysts Volume 1: Applications at the Nano-Scale, *ACS Symposium Series*, **2020**, *Chapter 5*, 151-182
- **J.J. Wiesfeld**, P. Peršolja, F.A. Rollier, A.M. Elemans-Mehring, E.J.M. Hensen, Cellulose Conversion to Ethylene Glycol by Tungsten Oxide-based Catalysts, *Mol. Catal.*, **2019**, *473*, 110400
- **J.J. Wiesfeld**, R. Gaquere, E.J.M. Hensen, Mesoporous Doped Tungsten Oxide for Glucose Dehydration to 5-Hydroxymethylfurfural, **2019**, *ACS Sustainable Chem. Eng.*, **2019**, *7* (8), 7552-7562
- **J.J. Wiesfeld**, N.A.J.M. Sommerdijk, E.J.M. Hensen, Early Transition Metal Doped Tungstite as an Effective Catalyst for Glucose Upgrading to 5-Hydroxymethylfurfural, *Catal Lett.*, **2018**, *148*, 3093-3101
- L. Meng, B. Mezari, M.G. Goesten, W. Wannapakdee, R. Pestman, L. Gao, **J.J. Wiesfeld**, E.J.M. Hensen, Direct synthesis of hierarchical ZSM-5 zeolite using cetyltrimethylammonium as structure directing agent for methanol-to-hydrocarbons conversion, *Catal. Sci. Technol.*, **2017**, *7*, 4520-4533
- Yue, G. Li, E.A. Pidko, **J.J. Wiesfeld**, M. Rigutto, E.J.M. Hensen, Dehydration of Glucose to 5-Hydroxymethylfurfural Using Nb-doped Tungstite, *ChemSusChem*, **2016**, *9* (17), 2421-2429
- S.I. Presolski; R. van der Weegen; **J.J. Wiesfeld**; E. W. Meijer, Efficient Routes to A₃B-Type meso-(4-Carboxyphenyl) Porphyrin Derivatives, *Org. Lett.*, **2014**, *16* (7), 1864–1867