



### Elias Feghali

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## Biography

Elias Feghali is an assistant professor of chemical engineering in the mechanical engineering department. Dr. Feghali holds a masters in chemical engineering (French diplôme d'ingénieur) as well as a masters in molecular and supramolecular chemistry from the Université de Strasbourg. In 2012 he joined the French Atomic Energy and Alternative Energy Commission (CEA) for his PhD. Afterwards, he worked as a postdoctoral fellow between SCION (New Zealand) and VITO (Belgium) and CSIRO (Australia). Dr. Feghali has been involved in several R&D projects in the fields of chemistry and chemical engineering such as: biomass valorisation, plastic waste recycling, homogenous and heterogeneous catalysis, bio-polymer formulation and membrane separation technology.

## Peer-reviewed Journals

### International

- E. Féghali, G. Carrot, P.Thuéry, C. Genre, T. Cantat, *Energy Environ. Sci.*, 2015, 8, 2734-2743. Convergent Reductive Depolymerisation of Wood Lignin to Isolated Phenol Derivatives by Metal-Free Catalytic Hydrosilylation. Highly important (top 20%).
- E. Feghali, T. Cantat, *ChemSusChem*, 2015, 8, 980-984. Room Temperature Organocatalysed Reductive Depolymerisation of Waste Polyethers, Polyesters and Polycarbonates.
- E. Feghali, T. Cantat, *Chem.Commun*, 2014, 50, 862-865. Unprecedented organocatalytic reduction of lignin model compounds to phenols and primary alcohols using hydrosilanes. Highlighted in: *ChemInform\**
- E. Féghali, O. Jacquet, P.Thuéry and T. Cantat, *Catal. Sci. Technol.*, 2014, 4, 2230-2234. Catalytic hydrosilylation of oxalic acid: chemoselective formation of functionalized C2-products. (Cover article)
- E. Feghali, L. Barloy, J-T. Issenhuth, L. Karmazin-Brelot, C. Bailly, and Michel Pfeffer, *Organometallics*, 2013, 32, 6186–6194. Cyclometalation of (2R,5R)-2,5-Diphenylpyrrolidine and 2-Phenyl-2-imidazoline Ligands with Half-Sandwich Iridium(III) and Rhodium(III) Complexes.
- L. Barloy, E. Feghali, M. Henry, L. Karmazin-Brelot, C. Bailly, and M. Pfeffer, *Organometallics*, 2013, 32, 6195–6200. Serendipitous Self-Assembly of Cyclometalated Complexes through Hydrogen Bonds: Dimers or Chains within Compact or Porous Networks.

## Patents

- E. Feghali, T. Cantat, International Patent WO 2016005836 A1, filed on 09/07/2014. Lignin depolymerisation process using mild reaction conditions.
- E. Feghali, T. Cantat, International Patent WO 2016005837 A1, filed on 09/07/2014. Process for the preparation of aromatic compounds from lignin.
- E. Feghali, T. Cantat, International Patent Application WO 2016/098021 A1, filed on 17/12/2014. Depolymerisation process for oxygenated polymeric materials.