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A. PERSONAL DETAILS

Name: Edyta Tabor
Office address: J. Heyrovský Institute of Physical Chemistry of the CAS
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B. RESEARCH INTEREST AND SKILLS

Synthesis of zeolites with controlled Al distribution and controlled formation of metal ion active species.
Description of the structure of local centers on atomic level and their catalytic properties using FTIR, Mössbauer, EPR and UV-VIS spectroscopy.
Main achievements:

- Determination of the influence of Al distribution in zeolites on the mechanism of acid-base catalyzed reactions
- Establishment of Mössbauer parameters of Fe species in zeolites active in N_2O decomposition and oxidation of hydrocarbons
- Development of inorganic analogues of enzymes, which are able to split molecular oxygen and selectively oxidize methane at room temperature.

C. EDUCATION

2003 – 2007	Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences, Kraków, Poland; specialization: organic synthesis, catalysis.
2000 – 2001	Scholarship at the Université Pierre et Marie Curie, Paris VI, France.
1998 – 2003	Department of Catalysis, Faculty of Chemistry, Jagiellonian University, Kraków, Poland specialization: deNO_x process, EPR spectroscopy.

D. DEGREE

16. 09.2 021	Habilitation in Chemical Science, Faculty of Chemistry, Jagiellonian University, Kraków, Poland Dissertation title: Active sites in zeolite catalysts: Atomic-level insight by FTIR and Mössbauer spectroscopy
14. 11. 2007	Ph.D. in Chemistry, Catalysis, Kraków Thesis advisor: Professor Jerzy Haber, Dissertation title: Comparison of catalytic activity of metalloporphyrins and their μ-oxo complexes in oxidation of hydrocarbons.
26. 06. 2003	M.Sc. in Chemistry, Kraków Thesis advisor: Professor Zbigniew Sojka, Dissertation title: Interaction of NO_x and O_2 with the surface of zirconia, ceria and mixed ceria-zirconia oxides.

E. RESEARCH EXPERIENCE

2008 – now	Department of Structure and Dynamics in Catalysis, J. Heyrovský Institute of Physical Chemistry of the CAS, Prague, Czech Republic; specialization: synthesis and characterization of zeolites;
2010 (Aug.-Oct.)	Dalian Institute of Physical Chemistry, CAS, China; Bimetallic catalysts Sn, Fe supported on zeolites and their application for PROX reaction
2010 (Feb.)	Research Centre for Energy, Hungarian Academy of Sciences; evaluation of Mössbauer spectroscopy data using MossWinn software
2009 (Sept.)	Research Centre for Energy, Hungarian Academy of Sciences; application of Mössbauer spectroscopy for studies of Fe zeolites
2006 (Nov.-Dec.)	CNR –Istituto di Scienze e Tecnologie Molecolari, Milano, Italy; synthesis of fluorous compounds for the fluorous biphasic system

Invited lectures and awards

2020 (Nov.)	National Government Award - the Czech Intellect award in the Invention category for unique methane to methanol transformation.
2019 (Apr.)	ERA Nanocatalysis day, Prague, Czech Republic
2019 (March)	Faculty of Chemistry Jagiellonian University, Cracov, Poland
2015 (Apr.)	Prize of Petr Sedmera of the Ioannes Marcus Marci Spectroscopic Society
2012 (Sept.)	International Symposium on the Industrial Applications of the Mössbauer Effect, Dalian, China

F. SELECTED PUBLICATIONS LIST

h index 18, 42 papers, total citations 886 (according to Scopus database)

1. **International patent** number: WO2020200336-A1 CZ201900210-A3: E. Tabor, J. Dědeček, S. Sklenak, K. Mlekodaj, Z. Sobalik, Use of catalyst for production of methanol from methane, where catalyst comprises zeolite having pairs in skeleton based on total number of all aluminum atoms in zeolite, and transition metal cation.
2. K. Mlekodaj, M. Lemishka, S. Sklenak, J. Dedecek, **E. Tabor (corresponding author)**, ChemComm, **2021**, 57, 3472-3475. **(IF 5.99)**
3. E. Tabor, M. Lemishka, J. E. Olszowka, K. Mlekodaj, J. Dedecek, P. C. Andrikopoulos, S. Sklenak, ACS Catal., **2021,** 4, 2340–2355. **(IF 12.35)**
4. **E. Tabor**, J. Dedecek, K. Mlekodaj, Z. Sobalik, P. C. Andrikopoulos and S. Sklenak, *Scien. Adv.*, **2020,** 6, 20, eaaz9776. **(IF 13.16)**
5. **E. Tabor**, M. Lemishka, Z. Sobalik, K. Mlekodaj, P. C. Andrikopoulous, J. Dedecek and S. Sklenak, *Commun. Chem.-Nat.*, **2019**, 2, 71.
6. **E. Tabor (corresponding author)**, G. Sádovská, M. Bernauer, P. Sazama, J. Nováková, V. Fíla, T. Kmječ, J. Kohout, K. Závěta and Z. Sobalík, *Appl. Catal. B: Environ.*, **2019**, 240, 358-366. **(IF 16.68)**
7. J. Dědeček, **E. Tabor (corresponding author)** and S. Sklenak, *ChemSusChem*, **2019**, 12, 556-576. **(IF 7.96)**