

## CV of Gábor Várhegyi

### Personal Information

- Place and date of birth: Budapest , 1947
- Married, two grown-up children

### Address

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### Degrees

- 1994: Doct. Habil., Budapest University of Technology and Economics
- 1992: Doctor of Chemical Science (D.Sc.), Hungarian Academy of Sciences
- 1980: Candidate of Chemical Science (C.Sc.), Hungarian Academy of Sciences (recognized as PhD by the Budapest University of Technology and Economics)
- 1973: Doctoral degree, Loránd Eötvös University of Sciences, Budapest
- 1970: M.Sc. in Chemistry, Loránd Eötvös University of Sciences, Budapest

### Positions

- 1 July 2013 – Independent scientist
- 1 July 2013 – External advisor of the Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences. Earlier positions in this Institute and its predecessors: Head of the Group of Thermal Reaction Studies (2008-2013); Head of Department of Environmental Chemistry (1999-2007); Head of Department of Thermal Analysis (1998); Head of Department of Macromolecular Chemistry (1996-1997); Scientific adviser (1992-1995), Senior researcher (1980-1992); Researcher (1973 - 1979)

### Projects

- 2014-2017: Participant in Norwegian project *Enabling the biocarbon value chain for energy* (BioCarb+, <http://www.sintef.no/Projectweb/BioCarb/Enabling-the-biocarbon-value-chain-for-energy-BioCarb/> )
- 2008-2012: Project Manager of a Hungarian OTKA research project entitled "*Study of the Chemical Processes of Biomass Utilization*". ([See the Final Report here](#))
- 2005-2007: Project Manager of the Hungarian team in a LIFE project of the European Union entitled "*Biochar based co-generation alternative*" (Acronym: BioCoAl, contact number: LIFE05 ENV/IT/00801)
- 1995-2005: Project Manager in Hungarian research projects on biomass and other fuels.
- 1993-1996: Project Manager of the Hungarian team in a JOULE II project of the European Union ("*Fuel reactivity and release of pollutants and alkali vapours in pressurized solid fuel combustion for combined cycle power generation*", JOU2CT920037)

- 1990-1997: Principal Investigator in two consecutive US - Hungarian Science and Technology Joint Fund grants on biomass research (1990-1997)

### Main Research Topics

- Thermal decomposition and gasification/combustion properties of biomass materials and other solid fuels
- Reaction kinetic evaluation of experiments at arbitrary temperature - time functions assuming complex mechanism schemes
- Developing software for reaction kinetic evaluation, computer control, data acquisition and data processing of measurement systems

### Experience Abroad

- 2005 – : Visits at the Norwegian University of Science and Technology, Trondheim and at the SINTEF Energy Research, Trondheim. Subject: biomass research and teaching on PhD courses.
- 2007-2009: Visits at the China University of Petroleum. Subject: biomass research. (Guest professor title: 2009-2014).
- 1987 - 2000: Visits at the Hawaii Natural Energy Institute of the University of Hawaii, USA. Subject: Charcoal formation from biomass materials (18 months combined)
- 1996: Visiting scientist at the National Institute for Resources and Environment, Japan. Subject: Thermochemical conversion of biomass materials (2 months)
- 1973 - 1974: Postdoctoral research scholarship at the École Polytechnique, Paris, France. Subject: thermodynamics (6 months)

### Memberships

- President of the [Working Committee for Thermal Analysis of the Hungarian Academy of Sciences](#)
- Member of the [National Committee of The Combustion Institute](#)

### Publications

- Author/coauthor of 109 English language research papers (see the [list](#)).
- The *Scopus* database shows ca. 4600 independent citations till 9 January 2018 ([screenshot](#)). *Google Scholar* collected a total of ca. 7000 citations, as shown [here](#).
- An article [Várhegyi et al, 1997] is currently the fourth by the number of citations in the *Journal of Analytical and Applied Pyrolysis* (an Elsevier journal) as shown by *Scopus*. (See the top of this list [here](#)).
- An article [Antal and Várhegyi, 1995] is presently the 14<sup>th</sup> by the number of citations in the *Industrial & Engineering Chemistry* (a journal of the *American Chemical Society*) as shown by *Scopus*. (See the top of this list [here](#))