

CV of Gábor Várhegyi

Personal Information

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

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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 105 English language research papers (see the [list](#)).
- The Hungarian National Scientific Bibliography (MTMT) lists 4469 independent citations. This database contains citation data both from *Web of Science* and *Scopus*. The data relevant for Gábor Várhegyi can be found in Hungarian at address <https://vm.mtmt.hu/www/index.php?AuthorID=10007012>) (See also the Appendix at the end of this document.)
- An article [Várhegyi et al, 1997] is presently the third by the number of citations in the *Journal of Analytical and Applied Pyrolysis* (an Elsevier journal) as shown by the *Web of Science*. (See the top of this list [here](#)).
- A paper [Antal and Várhegyi, 1995] appeared among the most cited articles of *Industrial & Engineering Chemistry* (a journal of the *American Chemical Society*) on an all-time basis from June 2008 till April 2012. (It is still the 14th by citations according to the *Web of Science*. See the most cited papers in this journal by *Web of Sciences* [here](#).)

- An article [Várhegyi et al, 2011] was among the most read articles of *Energy & Fuels* (a journal of the *American Chemical Society*) in 2011 on a yearly basis, as shown [here](#).

An Appendix to the Publications: The data of by 15 best-cited works by Elsevier's *Scopus* database are listed below, as recovered on 9 January 2017. Scopus was set to show only the independent citations (i.e. to exclude the "self-citations" from the data).

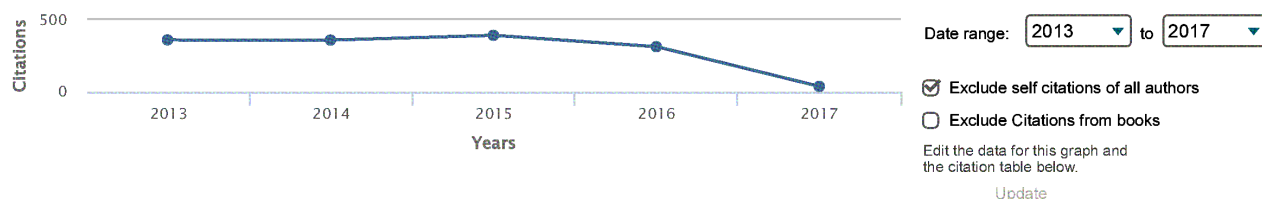
The independent citations of 15 selected papers are listed. Column "Subtotal" contains the sum of the independent citations since 2013, while column "Total" indicates the overall number of the independent citations for each of the selected papers. The first row covers all the 91 publications of which the citations are surveyed by *Scopus*. Its last value, 4165, is sum of the independent citations for these 91 papers.

Self citations of all authors are excluded.

Citation overview This is a overview of citations for the documents you selected

91 cited documents [Back to document results](#) | [Add to list](#)

Document h-index : 31 Scopus does not have complete citation information for articles published before 1996. [View h-graph](#)



Documents

Citations

Sort on: [Date \(newest\)](#) [Citation count \(descending\)](#)

		<2013	2013	2014	2015	2016	2017	Subtotal	>2017	Total
	Total	2699	361	360	393	314	38	1466	0	4165
1	Cellulose pyrolysis kinetics: The current state of knowledge	1995	470	38	41	50	47	2	178	648
2	Kinetic modeling of biomass pyrolysis	1997	221	32	28	25	21	4	110	331
3	Thermogravimetric analysis and devolatilization kinetics of ...	2002	130	26	36	41	40	9	152	282
4	Kinetics of the thermal decomposition of cellulose, hemicell...	1989	146	17	15	15	12	1	60	206
5	A round-robin study of cellulose pyrolysis kinetics by therm...	1999	147	15	10	10	12	3	50	197
6	Cellulose Pyrolysis Kinetics: Revisited	1998	116	18	12	11	13	1	55	171
7	Is the broido-shafizadeh model for cellulose pyrolysis true?	1994	103	10	8	6	10		34	137
8	Productive and parasitic pathways in dilute acid-catalyzed h...	1992	93	11	14	13	10	1	49	142
9	Thermal decomposition of polypropylene in the presence of wo...	2000	84	9	13	16	7	1	46	130
10	SIMULTANEOUS THERMOGRAVIMETRIC-MASS SPECTROMETRIC STUDIES OF...	1988	70	6	8	9	1		24	94
11	Formation of charcoal from biomass in a sealed reactor	1992	68	7	4	3	6		20	88
12	Decomposition of cellulose and glucose in hot-compressed wat...	1998	79	3	7	3	3		16	95
13	Thermogravimetric and reaction kinetic analysis of biomass s...	2004	55	7	9	8	5		29	84
14	Review of methods for improving the yield of charcoal from b...	1990	47	7	8	4	11		30	77
15	Thermogravimetric/mass spectrometric characterization of two...	1996	60	6	7	4	4		21	81