

Curriculum Vitae

Name: Prof.dr.ir. G.M.W. (Gerrit) Kroesen
Given names: Gerardus Maria Wilhelmus
Date of birth:
Address: Eindhoven University of Technology (TU/e)
Department of Applied Physics
P.O. Box 513, 5600 MB Eindhoven, the Netherlands
Contact info:



Professional Career

2012-present	Dean, Department of Applied Physics, Eindhoven University of Technology
2000-present	Full professor of Plasma Physics, leader of the group Elementary Processes in Gas Discharges (EPG), Department of Applied Physics, TU/e
2008-2012	Vice Dean and Board Member, Department of Applied Physics, TU/e
1997-2000	Associate professor, Applied Physics, TU/e
1997	Visiting Professor, Kyoto University, Japan
1986-1997	Assistant professor, Applied Physics, TU/e
1990	Research Fellow, IBM Research, Yorktown Heights, NY, USA

Academic Training and Education

1983-1988	PhD, Applied Physics, TU/e
1977-1983	Master, Applied Physics, TU/e (Cum Laude)
1971-1977	Secondary Education, Atheneum B, Eijkhagencollege, Landgraaf (Cum Laude)

Present Professional Duties

- Member, Board of the International Plasma Medicine Society
- Member, Evaluation Panel on the Trans Regio Collaborative Research Centre "Fundamentals of Complex Plasmas", German Research Society DFG
- Coordinator, Research Priority "Plasma Science" of the Eindhoven University of Technology
- Member, TU/e committee on Gender Equality
- Member, National Platform on Microgravity research, Netherlands Space Organization NSO

Selection of Past Professional Duties

- Founder and chair, Section on Dusty and Colloidal Plasmas, Plasma Physics Division, European Physical Society (up to 2006)
- Member, Editorial Board of Journal of Physics D, Institute of Physics IOP, United Kingdom
- Chair, Plasma Physics Section, Dutch Physical Society
- Member, jury of the President of Ireland Young Researcher's award and the E.T.S. Walton Visitor award, Science Foundation Ireland SFI (until 2007)
- Member, Plasma Physics Board of the European Physical Society (1999-2006)
- Member, Evaluation Committees of several "Sonderforschungsbereiche" in Greifswald, Kiel, and Bochum / Wuppertal
- Member of the evaluation committee of the CNRS-laboratory LPGP in Orsay, France and of the GREMI laboratory in Orléans.
- Coordinator, three European Commission funded projects on Dusty Plasmas, each comprising 6 universities and 6 industries all over Europe, budgets around 5 M€ each, 1998-2004.

Awards, Grants and Honorable Memberships

- Von Engel and Franklin Award for Plasma Physics, International Conference on Phenomena in Ionized Gases, 2015
- Fellow, Institute of Physics IOP, United Kingdom
- “Pionier” Award, Dutch Organization for Scientific Research NWO and Dutch Technology Foundation STW, 1996
- Visiting Professorship Award, Japanese Society for the Promotion of Science JSPS, 1997
- SHELL Travel Award, 1986

Scientific Output and Impact

- Number of publications in major peer-reviewed journals: 625
- Total number of citations: 9993, averaging 16 per publication
- Hirsch index: 47

Teaching

- *OGO Signals and Systems*, mandatory class for physics students, 2016-present
- *Optics*, mandatory class for Physics students, 1996-2002
- *Optics*, mandatory class for Biomedical Engineering students, 1998-2014
- *Signals and Systems*, mandatory class for Physics students, 2006-2016
- *Ellipsometry*, optional class for Physics students, 1995-present

Top 5 Publications

1. M.G. Kong, G.M.W. Kroesen, G. Morfill, T. Nosenko, T. Shimizu, J. Van Dijk, and J.L. Zimmermann, *Plasma Medicine: an introductory review*, New J. Phys. **11** (2009) 115012, times cited: 1567
2. S. Samukawa, M. Hori, S. Rauf, K. Tachibana, P. Bruggeman, G. Kroesen, J. Whitehead, A. Murphy, A. Gutsol, S. Starikovskaia, U. Kortshagen, J.-P. Boeuf, T. Sommerer, M. Kushner, U. Czarnetzki, N. Mason, The 2012 Plasma Roadmap, J.Phys.D. **45** (2012) 253001, times cited: 513
3. E. Stoffels, A.J. Flikweert, W.W. Stoffels, G.M.W. Kroesen, *Plasma needle: a non-destructive atmospheric plasma source for fine surface treatment of (bio)materials*, Plasma Sources, Sci. & Technol. **11** (2002) 383-388, times cited: 769 (in 2002 the best cited paper in this journal)
4. H. Kersten, H. Deutsch, H. Steffen, G.M.W. Kroesen, R. Hippler, *The energy balance at substrate surfaces during plasma processing*, Vacuum B **63** (2001) 385-431, times cited: 348 (in 2001 the best cited paper in this journal)
5. J. Golda, J. Held, B. Redeker, M. Konkowski, P. Beijer, A. Sobota, G.m.w. Kroesen, N.S. Braithwaite, S. Reuter, M.M. Turner, T. Gans, D. O'Connell, V. Schulz-von-der-Gathen: Concepts and characteristics of the 'COST Reference Microplasma Jet', J. Phys. D: Applied Physics, **49** (2016) 84003, times cited 91

Patents

1. L.P. Bakker and G.M.W. Kroesen, PCT WO 00/16376, 15 September 1999, *Method of adjusting the light spectrum of a gas discharge lamp, gas, discharge lamp, and luminaire for said lamp*

2. D.C. Schram, G.M.W. Kroesen, European patent 0297637 *Method of treating surfaces with the aid of a plasma and a reactor for carrying out the method*
3. D.C. Schram, G.M.W. Kroesen, U.S. patent 4,871,580 *Method of treating surfaces with the aid of a plasma*
4. H.J.A. Schuurmans, J. Werner, A. van der Scheer, D.C. Schram, G.M.W. Kroesen, European patent 88201229.7 (property of SHELL), *Apparatus suitable for plasma surface treating and process for preparing membrane layers*

Organization of International Conferences

- Organizer & Chair, 12th International Symposium on Light Sources, Eindhoven, July 11-15, 2010
- Organizer and Chair, International Conference on Phenomena in Ionized Gases ICPIG, Eindhoven, 2005
- Organizer & Secretary, Annual Symposium of the Deutsche Gesellschaft für Angewandte Optik, Eindhoven, May 29 - June 1, 2012
- Organizer and Secretary, 12th ESCAMPIG, Noordwijkerhout, 1994
- Member, Executive Committee, Gaseous Electronics Conference (GEC), 1997-1999
- Organizer and chair, Gordon Research Conference on Plasma Chemistry, Tilton School NH, 1998
- Member, Program Committee, Plasma Physics Conference, European Physical Society, Dublin, 2010
- Chair, Programme Committee Dusty Plasmas, European Physical Society, London, 2004