

Curriculum Vitae

Name: Prof.dr.ir. G.M.W. (Gerrit) Kroesen
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Date of birth: May 10, 1958
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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