

# Ingmar Swart

Assistant Professor

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## Personal Data

Year and place of birth: 1980, Opsterland, the Netherlands

Languages: Frisian, Dutch\*, English\*, German\* (\*used in teaching)

## Education

2004 – 2008 Ph.D. in physical chemistry, *Cum Laude* (highest honor awarded)  
Faculty of Science, Utrecht University, Utrecht, the Netherlands.

1999 – 2004 M.Sc. in physical chemistry, *Cum Laude* (highest honor awarded),  
Faculty of Science, Utrecht University, Utrecht, the Netherlands.

## Research Experience

2012 – present Tenure-track Assistant Professor, Debye Institute for Nanomaterials  
Science, Utrecht University, the Netherlands.

2009 – 2012 NWO-Rubicon fellow, Institute of Experimental and Applied Physics,  
University of Regensburg, Germany.  
Project: *Single-molecule chemistry and physics explored by low-temperature  
scanning probe microscopy.*  
Group leader: Prof. dr. J. Repp

2008 – 2009 Post-doctoral researcher, Debye Institute for Nanomaterials Science,  
Utrecht University, the Netherlands.  
Project: *Scanning tunneling microscopy and atomic force microscopy of  
semiconductor nanocrystals.*  
Group leaders: Prof. dr. P. Liljeroth and Prof. dr. D. Vanmaekelbergh

2004 – 2008 Ph.D. student, Debye Institute for Nanomaterials Science, Utrecht  
University, the Netherlands.  
❖ *Adsorption of molecules on transition metal clusters in the gas-phase.*  
Collaboration with the Steacie Institute for Molecular Sciences,  
Ottawa, Canada, and the Fritz-Haber-Institut, Berlin, Germany.  
❖ *Synchrotron based spectroscopy of catalytically active particles*  
Collaboration with the Delft University of Technology, the  
Netherlands.

Advisors: Prof. dr. ir. B.M. Weckhuysen, Prof. dr. F.M.F. de Groot, Dr. A.  
Fielicke

- 2004 Research project (6 months), Department of Chemistry, University of California at Berkeley, USA.  
Project: *Exciton dynamics in semiconductor nanostructures*.  
Advisor: Prof. dr. S.R. Leone
- 2002 – 2003 Master of Science research project (1 year), Debye Institute for Nanomaterials Science, Utrecht University, the Netherlands.  
Project: *Spectroscopy of quantum dots and quantum dot structures*.  
Advisor: Prof. dr. A. Meijerink
- 2003 Bachelor of Science research project (3 months), Debye Institute for Nanomaterials Science, Utrecht University, the Netherlands.  
Project: *Hydrogen diffusion in switchable mirrors*.  
Advisor: Prof. dr. J.J. Kelly

### Grants, scholarships and awards

- 2013 FOM-Vrij programma ‘*Designing Dirac carriers in semiconductor honeycomb superlattices*’ (2.3 M€, co-applicant), awarded by the Foundation for Fundamental Research on Matter.
- 2013 ECHO-STIP grant (260 k€), awarded by the Netherlands Organisation for Scientific Research.
- 2011 *VENI grant* (250 k€), awarded by the Netherlands Organisation for Scientific Research.
- 2009 *Rubicon grant* (44 k€), awarded by the Netherlands Organisation for Scientific Research (NWO), aim of the Rubicon program: allow talented researchers to perform postdoctoral research at a top research institution outside the Netherlands.
- 2007 *Price for best lecture held by a Ph.D. student*, NCCC VIII conference, 5-7 March 2007, Noordwijkerhout, the Netherlands
- 2003 *Stipend to fund research stay at the University of California at Berkeley*, Karel Frederik Stichting, Utrecht
- 2003 *Stipend to fund research stay at the University of California at Berkeley*, Stichting de Fundatie van de Vrijvrouwe van Renswoude te 's-Gravenhage, 's Gravenhage

### Teaching Experience

#### ❖ Lecturing

- *Solids & Solid Surfaces*, 3<sup>rd</sup> year B.Sc. level course, together with Prof. dr. D. Vanmaekelbergh (in English).
- *Computational Quantum Mechanics*, M.Sc. level course, together with Dr. M.A. van Huis (in English).

#### ❖ Teaching assistant

- *Atomic and Molecular Physics*, 3<sup>rd</sup> year ‘Lehramt’ students, U. Regensburg in German.
- *Thermodynamics*, B.Sc. Physics level course, U. Regensburg in German.
- ‘*Introduction to Quantum Chemistry*’, B.Sc. Chemistry level, U. Utrecht, in Dutch.
- ‘*Analytical Chemistry lab course*’, B.Sc. Chemistry level course, U. Utrecht, in Dutch.
- ‘*Quantum Chemistry & Spectroscopy*’, M.Sc. Chemistry level, U. Utrecht, in English.

## Other Relevant Experience

- ❖ 10 invited talks at various universities and workshops (RWTH Aachen, University of Hamburg, University of Duisburg, ESPCI Paris Tech, Utrecht University, University of Twente, University of Leiden, University of Groningen, KOPO '09 Blaubeuren, Symposium on Frontiers of Nanoscopy).
- ❖ Reviewer for *Physical Review Letters*, *ACS Nano*, *the Journal of the American Chemical Society*, *Journal of Physical Chemistry C*, *Physical Chemistry Chemical Physics*.
- ❖ Co-organizer of the Dutch Graphene Day (May 3rd 2013).
- ❖ Co-organizer of the Optical and Electrical Spectroscopy of Single Quantum Dots workshop, Mallorca, Spain, from 10-12 March 2013.
- ❖ Co-organizer of the monthly Debye Colloquium at Utrecht University.
- ❖ Obtained a 'propedeuse' degree in Business Administration from the Erasmus University, Rotterdam, the Netherlands.

## References

- ❖ Prof. dr. J. Repp  
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- ❖ Prof. dr. P. Liljeroth  
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- ❖ Prof. dr. D. Vanmaekelbergh  
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Princetonplein 1, 3508 TA, Utrecht, the Netherlands  
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- ❖ Prof. dr. ir. B.M. Weckhuysen  
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- ❖ Prof. dr. F.M.F. de Groot  
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