

# Dr. Omkar S. Deshmukh

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## Personal Information

DATE OF BIRTH	:	20 March 1985
GENDER	:	Male
CATEGORY	:	General
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## Academic Qualification

<b>Ph.D (Applied Physics)</b> University of Twente, Netherlands	Nov. 2009 – Jan. 2015
<b>Thesis title: Soft microgel particles at fluid interfaces.</b> Thesis advisors: Prof. Frieder Mugele & Prof. Martien Cohen Stuart	
<b>M.Tech. (Chemical Engineering)</b> Indian Institute of Technology, Bombay	July 2006 – July. 2008 CGPI - 8.2/10
<b>B.Engg. (Chemical Engineering)</b> University of Pune	June 2002 – June 2006 I- Class (with Distinction)

## Academic & Research Experience

<b>Assistant Professor</b> IIT Guwahati, Guwahati	Mar 2020 - Present
<b>Visiting Professor</b> MITWPU, Pune	July 2019 - Feb 2020
<b>Post-doctoral researcher</b> University of Queensland, Australia	July 2015 - Sept 2018
<b>Research Associate</b> National Chemical Laboratory, Pune	Apr. 2015 - May. 2015
<b>PhD Researcher</b> University of Twente, The Netherlands	Nov 2009 - Jan 2015
<b>Project Assistant</b> National Chemical Laboratory, Pune	Aug. 2008 - Oct. 2009

## Publications

1. Omkar S. Deshmukh, Armando Maestro, Michel H. G. Duits, Dirk van den Ende, Martien Cohen Stuart, Frieder Mugele.  
**An equation of state and adsorption dynamics of soft microgel particles at air-water interface**, *Soft Matter*, 2014.  
DOI: [10.1039/C4SM00566J](https://doi.org/10.1039/C4SM00566J). (Imp Factor: 3.4, Citations: 52).
2. Omkar S. Deshmukh, Dirk van den Ende, Martien Cohen Stuart, Frieder Mugele, Michel H.G.Duits.  
**Hard and soft colloids at fluid interfaces: Adsorption, interactions, assembly and rheology**, *Advances in Colloid and Interface Science*, 2015.  
DOI: [10.1016/j.cis.2014.09.003](https://doi.org/10.1016/j.cis.2014.09.003). (Imp Factor: 9.92, Citations: 133)
3. Armando Maestro, Omkar S. Deshmukh, Frieder Mugele, Dominic Langevin.  
**Interfacial Assembly of Surfactant-Decorated Nanoparticles: On the Rheological Description of a Colloidal 2D Glass**, *Langmuir*, 2015.  
DOI: [10.1021/acs.langmuir.5b00632](https://doi.org/10.1021/acs.langmuir.5b00632) (Imp Factor: 3.56, Citations: 45)
4. Oliver W. Meldrum, Gleb E. Yakubov, Mauricio R. Bonilla, Omkar S. Deshmukh, Michael A. McGuckin, Michael J. Gidley **Mucin gel assembly is controlled by a collective action of non-mucin components, disulphide bridges, Ca<sup>2+</sup>-mediated links, and hydrogen bonding.**, *Scientific Reports*, 2018.  
DOI: [10.1038/s41598-018-24223-3](https://doi.org/10.1038/s41598-018-24223-3) (Imp Factor: 4.00, Citations: 38)
5. Ghanendra Gartaula, Sushil Dhital, Omkar S. Deshmukh, Gabriele Netzel, Michael J. Gidley  
**Rheological characterisation of cell walls from wheat flour and endosperm: effects of diferulate crosslink hydrolysis**, *Food Hydrocolloids*, 2019.  
DOI:[10.1016/j.foodhyd.2018.10.004](https://doi.org/10.1016/j.foodhyd.2018.10.004) (Imp Factor: 7.05, Citations: 3)
6. Omkar S. Deshmukh, Sushil Dhital, Sandra Olarte Mantilla, Heather Smyth, Michael Boehm, Stefan Baier, Jason R. Stokes.  
**Ring shear tester as an in-vitro testing tool to study oral processing of comminuted potato chips**, *Food Research International*, 2019.  
DOI:[10.1016/j.foodres.2019.04.037](https://doi.org/10.1016/j.foodres.2019.04.037). (Imp Factor: 5.34, Citations: 4)
7. Heather M. Shewan, Omkar S. Deshmukh, Gengning Chen, Sophia Rodrigues, Nichola Selway, Jason R. Stokes.  
**Interpreting rheological behaviour of sugar-fat mixtures as a function of solids phase volume**, *Journal of Food Engineering*, 2021.  
DOI:[10.1016/j.jfoodeng.2020.110474](https://doi.org/10.1016/j.jfoodeng.2020.110474). (Imp Factor: 4.5, Citations: 0)

Total citations: 275, h-index: 4, i10-index: 4 (Source: [Google Scholar](https://scholar.google.com/))

## Contributions at Conferences

- **COMPFLU-2018** **Oral**  
IIT Roorkee, India *Dec. 2018*
- **Annual European Rheology Conference** **Oral**  
Copenhagen, Denmark *Apr. 2017*
- **ACS March Meeting\*** **Oral**  
Denver, USA *Mar. 2015*
- **Dutch Soft Matter Meeting** **Oral**  
Enschede, Netherlands *June 2013*
- **Annual European Rheology Conference** **Oral**  
Leuven, Belgium *Apr. 2013*
- **Jamming & Rheophysics Meeting** **Oral**  
Corsica, France *Apr. 2010*
- **Annual European Rheology Conference** **Poster**  
Copenhagen, Denmark *Apr. 2017*
- **COMPFLU-2014: Symposium on Rheology of Complex Fluids** **Poster**  
Bengaluru, India *Dec. 2014*
- **International Soft Matter Conference\*** **Poster**  
Rome, Italy *Sept. 2013*
- **International Congress on Rheology** **Poster**  
Lisbon, Portugal *Aug. 2012*
- **Physics @ FOM** **Poster**  
Veldhoven, Netherlands *Jan. 2012*

\* - Presented on my behalf

## Participation in Workshops / Short courses

- **Short course on Colloids & Suspensions Rheology** **Lisbon, Portugal**  
*Aug. 2012*
- **JMBC course on Granular matter** **Enschede, Netherlands**  
*Feb. 2010*
- **SERC school on Rheology of Complex Fluids** **Mumbai, India**  
*Feb. 2008*