Masania CV

CV: Kunal Masania

Researcher identifiers: ORCID, Research ID, Google Scholar, Scopus

Date of birth: 22/03/1983, Nationality: British Lab web site: www.shapingmatterlab.com Twitter/X: @kmasania, @shaping_matter



CURRENT POSITION

2021 – present Associate Professor I tenured
Faculty of Aerospace Engineering, TU Delft, NL

PREVIOUS POSITIONS

2020 – 2021 Associate Professor II tenure track (tenured after 1yr10m) Faculty of Aerospace Engineering, TU Delft, NL

2016 – 2019 Senior Scientist

Department of Materials, ETH Zürich, CH

2011 – 2015 Group Leader

Faculty of Engineering, University of Applied Sciences and Arts, Northwestern Switzerland (FHNW), CH

EDUCATION

- 2010 PhD DIC, Department of Mechanical Engineering, Imperial College London, UK Supervisors: Prof. Ambrose Taylor and Prof. Tony Kinloch (**Nominated Unwin Prize**)
- 2006 MSc DIC, Department of Aeronautics & Department of Chemical Engineering, Imperial College London, UK (Awarded DSTL Prize best thesis)

SOCIETAL IMPACT

- -Early-stage researchers: 5 Postdoc, 10 PhD students and 10 Master thesis students at TU Delft, NL (Now hiring 8 PhDs and 5 Postdocs through new funds). Currently 33% female representation in our group.
- -6 Patents and 2 co-founded start-ups based on our publications/patents (Dr Gantenbein, NematX AG and Dr Kleger, sallea AG).

TEACHING ACTIVITIES

- 2024 Composites United Master trainee programme, TU Delft, NL
- 2023 DoSChem Department of Chemistry Summer School, Vienna, AT
- 2023 Biobased materials masterclass lecturer (Master) IDE, TU Delft, NL
- 2023 Track co-ordinator for Materials & Manufacturing (Master), TU Delft, NL
- 2022 Multiscale Manufacturing of Advanced Composites Summer School
- 2020, 2021, 2024 Design synthesis exercise (Bachelor end group project), TU Delft, NL
- 2021, 2023 Lecturer IDEA League computational design for AM summer school (Master), NL
- 2020- Course leader Manufacturing of aerospace structures & materials (Master) and Additive manufacturing (Master), TU Delft, NL
- 2020- Guest Lecturer Nanotechnology (Bachelor TNW), and Production of aerospace systems (Bachelor), Coach Design synthesis exercise (Bachelor), TU Delft, NL
- 2006 2019 Advanced Composites at ETH Zürich, CH, FHNW, CH & Imperial College London, UK

OUTREACH

- 2023-2024 PhD student leading the Climate Fresk action at TU Delft, NL
- 2021 Associations Animath and Filles & Maths "Girls, Maths and IT Days" with the theme "L'Espace pour toutes!". At the "Space for all event", PhD student presented to \sim 150 female high school students.
- 2017 Expert and coach for ETH Week, "Manufacturing the Future", 2017.
- 2011 2019 Nationaler Zukunftstag (National future day) and Schweizer Jugend forscht (Swiss youth research) led week long activities (such as skateboard engineering and manufacturing) with high school students to engage their excitement for STEM).

Masania CV

ORGANISATION OF SCIENTIFIC MEETINGS (SELECTED)

2022 Local organising committee and AM session chair, European conference on composite materials (ECCM) & guest ass. editor for Functional Composite Materials Journal, Lausanne, CH

- 2022 Scientific organising committee Multiscale Manufacturing Summer School, NL
- 2021 Scientific Committee of the 2nd International Conference on the Additive Manufacturing of Composite Materials, FR (online)
- 2019 Organiser of SAMPE conference on the Additive Manufacturing of Composites, CH

INSTITUTIONAL RESPONSIBILITIES AT TU DELFT

- 2024 EIT Manufacturing Net Zero Industry Workgroup
- 2024 Evaluation panel of the NWO Veni Personal Grant
- 2023 TU Delft delegation for India research collaboration and MOUs with IIT Dehli/Mumbai and IISc
- 2023 Mentoring several academics (AS, AE, Mech, IDE) and contributed to successful ERC StG/CoG and NWO personal grants of colleagues.
- 2023 Established academic TU Delft ISAE SUPEAERO large scale collaboration
- 2023 Track coordinator Materials and Manufacturing: Aerospace Structures and Materials
- 2022 Founding member of a new TU Delft Additive Manufacturing Institute, NL
- 2022 Bioengineering Institute educational workgroup developing a new cross-disciplinary, cross-faculty minor in bio-inspired and biological materials engineering, TU Delft, NL
- 2021 ESA Materials Space Environmental Survivability workgroup, NL
- 2020 Member of Hiring Committees; 5 Assistant Professorships at TU Delft, NL

REVIEWING ACTIVITIES

- -Reviewer of circa 25 manuscripts a year for journals such as Nature Materials, Nature Communications, Advanced Materials, ACS Applied Material Interfaces, Acta Biomaterialia, Advanced Material Technologies, Material Horizons, Additive Manufacturing, Materials and Design, Journal of Materials Science; Composites Science and Technology, Composites: Part A; Composite Structures; Composites: Part B, Journal of the Mechanical Behaviour of Biomedical Materials and Extreme Mechanics Letters.
- -Evaluator of proposals for NWO, NL, DFG, DE, ANR, FR & ERC, EU.
- -Several PhD committees in TU Delft NL and invited as examiner to ISAE SUPAERO FR, ETH Zürich CH and Imperial College. London, UK defences.

AWARDS & PRIZES

- 2023 ERC Consolidator Grant Awardee, Project AM-IMATE
- 2022 Online Lecturer of the Year Award, Aerospace Engineering, TU Delft, NL
- 2020 & 2022 Spark award shortlist for best invention at ETH Zürich, CH
- 2020, 2021 & 2023 Delft Institute of Bioengineering seed funding for innovative projects, NL
- 2019 Top 3D Printing Industry research team shortlist, UK
- 2016 JEC Innovation Award for automated production of recyclable composite parts, FR
- 2015 ETH Foundation Career Seed grant, CH
- 2015 School of Engineering Excellence in Teaching prize, CH
- 2013 Advanced Manufacturing Fellowship, National Composites Centre, UK declined
- 2013 School of Engineering Research Excellence prize, CH
- 2013 Best Poster at the 36th annual meeting of the Adhesion Society, US
- 2009 ACMA POLYCON and Composites '09 best technical paper, US
- 2009 Royal Academy of Engineering UK travel award

SPORTING ACHIEVEMENTS

Six Himalayan first ascents (e.g. "<u>Lama Jimsa Kangri</u>" and "<u>Ranglana</u>"), First ascent of "<u>Storm o'clock</u>" in the Anti-Atlas range, and completion of the Patrioulle des Glaciers, Zermatt to Verbier (2x).