

AS

MOHAMMED

CONTACT

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LINKEDIN

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BASED

Heverlee, Belgium

AVAILABLE

October 2026

EDUCATION

PhD — THz Photonics & Data Communications

IEMN, University of Lille · 2021–2024

BS–MS Dual Degree — Physics

IISER Thiruvananthapuram · 2015–2020

TOOLKIT

COORDINATION

Trello · Asana · Jira · Notion ·

Confluence

MEDIA

Sony A7C · FX · Drone licensed ·

Adobe Illustrator

PHOTONICS

Lumerical FDTD · CST · HFSS · GDS

· SEM

CLEANROOM

Lithography · DRIE/RIE · Profilometry

WRITING

LaTeX · MS Office · Scientific

documentation

AWARDS

2021 Marie Curie Fellowship —

TERAOPTICS ITN

2019 JRF NET Rank Holder, India

(AIR 256)

2018 School Outreach Coordinator,

IISER

2015 INSPIRE Fellowship Holder

PHD · PHOTONICS · EDUCATOR

Abdu Subahan Mohammed

Photonics Educator · Content Creator · Research Coordinator

Photonics PhD and EU project coordinator combining deep silicon-photonics expertise with a genuine passion for teaching, storytelling and visual content creation. Coordinated a multi-disciplinary consortium across computational physics, nanofabrication and characterization, and produces professional video, graphics and presentations. Eager to translate world-class PIC knowledge into compelling online courses that reach a global audience.

CORE STRENGTHS

01 Coordination & Leadership

Coordinated 5-lab EU consortium (TOPOTERA). Managed researchers across physics, fabrication & characterization. Milestones, WP deliverables and reporting under Marie Curie ITN.

03 Photonics & Chips

Silicon photonics and PICs · THz/6G device design, fabrication and characterization · Lumerical FDTD, CST, HFSS.

02 Content & Media

Professional videography on Sony A7C with drone license. Adobe Illustrator, motion graphics, slide design and visual storytelling for technical material.

04 Teaching & Outreach

School Outreach Coordinator (IISER) · International conference presenter · TERAOPTICS exhibitor · Meta Ads, Instagram & LinkedIn.

EXPERIENCE

Postdoctoral Researcher — Times 6G

IEMN, University of Lille

2024 – PRESENT

Lille, France

- Designed and operated RF/THz experimental platforms for Reconfigurable Intelligent Surface (RIS) characterization in the 220–325 GHz band using VNAs.
- Device-level characterization (insertion loss, angular optimization, S-parameters); validated a Non-Line-of-Sight THz link for 6G systems.
- Authored literature reviews and communicated results across the project team.

Early-Stage Researcher · Project Coordinator

IEMN, Univ. Lille — TERAOPTICS / TOPOTERA · Marie Curie ITN

2021 – 2024

Lille, France

- Coordinated a 5-lab European consortium across computational physics, nanofabrication and device characterization — aligning experts toward shared milestones.
- Fabricated and characterized silicon PICs at 600 GHz — first experimental demonstration of topological functionalities at this frequency.
- Built a 600 GHz datacom testbed from scratch; VNA-based RF characterization (S-parameters, BER, EVM).
- Presented at major international conferences and represented TERAOPTICS as an exhibitor.

Marie Curie Research Intern

STFC UKRI — RAL Space

2021 · 1 MO

Didcot, UK

- Designed metallic waveguide blocks for silicon-chip integration in 600 GHz VNA setups; initiated TERAOPTICS partner collaboration.

Research Assistant

IISc Bengaluru

2021 · 4 MO

Bengaluru, India

- Contributed to on-chip quantum device design; cleanroom activities and process training.

Abdu Subahan Mohammed · Curriculum Vitae

01 / 02

REFERENCES

Prof. Guillaume Ducournau
University of Lille
guillaume.ducournau@univ-lille.fr

Prof. Gaétan Lévêque
University of Lille
gaetan.leveque@univ-lille.fr

LANGUAGES

English · Professional

French · Conversational

Hindi · Malayalam · Native

INTERESTS

Cinematography · Drone flying ·
Science storytelling · Online
education · Long-form video

CV · CONTINUED

Publications

01

Engineering the breaking of topological protection in valley photonic crystals enables chip-level functions for THz 6G communications

A. S. Mohammed et al.

Journal of Lightwave Technology · 2024

02

Broadband high-contrast-grating-type waveplates for the terahertz range

S. R. Ayyagari, A. S. Mohammed et al.

Opt. Express, 32(9), 15870–15881 · 2024

03

100 Gbit/s and Beyond IEEE 802.15.3d Channelization-Compatible THz Communications via Broadband MUTC Photodiode

E. Abacioglu et al.

IEEE Trans. THz Sci. Technol. · 2025

Conferences & Outreach

- **TERAOPTICS Exhibitor** — Represented the consortium at international THz industry events with live demos.
- **International Conference Speaker** — Talks on topological photonics & 600 GHz datacom across EU venues.
- **School Outreach Coordinator, IISER** — Designed hands-on physics demos and workshops for K–12 students.
- **Science Communicator** — Cinematic video, motion graphics and editorial slide design translating PIC research for non-specialists.