With funding from the:

Federal Ministry of Research, Technology and Space

DWIH New Delhi
Land of Ideas

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

# PARTICIPANT PROFILES

16 - 21 Nov 2026

Deep Tech Gateway India – Softlanding Programme 2026

Bengaluru & Hyderabad

## DWIH INNOVATE
GLOBAL PATHWAYS FOR SCIENCE-BASED INNOVATION

## A PROGRAMME OF

DWIH New Delhi
Land of Ideas

DAAD
Deutscher Akademischer Austauschdienst
German Academic Exchange Service

With funding from the:

Federal Ministry
of Research, Technology
and Space

## PROGRAMME PARTNERS

itic IIT HYDERABAD TECHNOLOGY INCUBATION CENTER

भारतीय सांकेतिक विज्ञान संस्थ हैदराबाद
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad
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# Deep Tech Gateway India – Softlanding Programme 2026

## DWIH Innovate - Global Pathways for Science-Based Innovation

DWIH Innovate – Global Pathways for Science-Based Innovation is a flagship initiative funded by the German Federal Ministry for Research, Technology and Space (BMFTR) for the period 2026–2029. The initiative is anchored at the German Centres for Research and Innovation (DWIH) worldwide, which are a unit of the German Academic Exchange Service (DAAD).

The programme aims to strengthen Germany's innovation ecosystem by fostering international mobility, technology transfer, and entrepreneurship among researchers and innovators. The initiative is designed and implemented in the DWIH countries, namely India, Japan, Brazil and the United States of America. The programme is targeted towards academic entrepreneurs, graduates and early-career researchers from Germany, who seek to develop high-potential innovations through international collaboration and gain first-hand experience in leading innovation ecosystems of the world. The focus areas of the programme align with the priority areas of the High-Tech Agenda of BMFTR, namely artificial intelligence, quantum technologies, microelectronics, biotechnology, fusion and climate-neutral energy generation, and technologies for climate-neutral mobility. The programme has three pillars: Softlanding opportunities, scholarships for internships and international networking.

The initiative kicks-off in India with the Deep Tech Gateway India – Softlanding Programme, a one-week international entrepreneurship with focus on Biotechnology and Mobility. Participants will gain first-hand exposure to India's research and innovation ecosystem through visits to high-technology labs at leading research institutions and deep-tech incubators; thematic workshops along with participation in one of India's largest technology conferences, Bengaluru Tech Summit 2026. Additionally, the programme will facilitate networking with key stakeholders from research, start-ups, industry and the innovation ecosystem in India.

# Participant Profiles

## Startup Idea

Development of a chemical storage method for green hydrogen using the bicarbonate–formate cycle as a solid hydrogen carrier. This approach uses an aqueous salt solution and a supported catalyst to enable reversible hydrogen storage and release, offering potential for safe, carbon-neutral, long-duration energy storage. The research focuses on improving the efficiency of the storage cycle and transferring laboratory-scale processes to pilot-plant applications. This idea, in collaboration with an industrial partner, H2APEX, has resulted in two patents relating to palladium catalysts supported on titanium oxide.



/in/mohammed


## Dr. Mohammed Al-Yusufi

**Postdoctoral Researcher**

**Association: Fraunhofer Institute of Applied Polymer Research IAP**


Mohammed is a chemical engineer and a postdoctoral researcher at Fraunhofer Institute of Applied Polymer Research (IAP). With a PhD in Chemistry and over five years of experience in materials development and chemical process scale-up, alongside being a certified Agile Product and Project Manager, his expertise spans chemical hydrogen storage, biomass conversion, and carbon dioxide valorisation. He focuses on translating innovative materials and technologies from laboratory and pilot scale towards commercial applications.

## Pravahak

develops multifunctional, additively manufactured lattice cores for drone battery thermal management. Its architecture integrates coolant flow, structural load-bearing, thermal energy storage, and cell-failure containment to address overheating and reduce downtime between drone flights. The technology builds on 11 peer-reviewed journal publications investigating the structural, thermal, and vibrational performance of architected lattices, including experimentally tested structures and their integration into hybrid-electric propulsion architectures. Currently at Technology Readiness Level (TRL) 4, Pravahak targets lightweight, biosecure cold-chain payload modules for medical drone logistics, with potential for further development towards hybrid cooling systems.



/in/akilan-m

## Akilan Mathiazhagan

**PhD Researcher**

**Association: Brandenburg University of Technology Cottbus–Senftenberg**

Akilan is a PhD researcher at the Chair of Aeroengine Design, Brandenburg University of Technology Cottbus-Senftenberg. His research focuses on designing thermal management architectures for hybrid-electric and fuel-cell aircraft propulsion, as well as additive manufacturing of metals and composites. He specialises in multifunctional cellular structures, including triply periodic minimal surfaces and topology-optimised lattices that serve as heat exchangers and load-bearing structural elements. Building on his research and experimental testing experience, he is developing Pravahak, a deep-tech concept for lightweight lattice thermal cores in unmanned aircrafts with versatile applications, including cold-chain payload modules for medical drone logistics and temperature-sensitive missions.

## Fibclick

develops AI-driven computer-aided engineering (CAE) software for composite manufacturing, with a focus on pultrusion. Fibclick's software enables engineers to design production processes and tooling layouts with less prior process knowledge, helping scale composite manufacturing for high-volume applications. Originating from research at Fraunhofer Institute for Casting, Composite and Processing Technology (IGCV) and the University of Augsburg, and incubated at European Space Agency Business Incubation Centre (ESA BIC) Bavaria, the startup has secured a major automotive supplier as a pilot customer. It is backed by the EXIST Business Start-up Grant and EXIST Transfer of Research programmes.

www.fibclick.de/



/in/isa-taflan

## Isa Semih Taflan

**Co-Founder and Chief Finance Officer**

**Association: Fraunhofer Institute for Casting, Composite and Processing Technology (IGCV)**

Isa is focused on making lightweight composite materials accessible for mainstream mobility applications, including cars, trains, and commercial vehicles, to enable weight reduction and energy savings at scale. Before co-founding Fibclick, he gained experience in strategy, controlling, and after-sales at BMW Group France and Porsche AG. His interests lie at the intersection of deep-tech commercialisation, small and medium-sized enterprises (SMEs), and sustainable mobility. He holds a Master of Science in Business Administration from the University of Augsburg and a Bachelor of Science in Economics from Johannes Gutenberg University Mainz.

## Vayura QNav

is developing a compact onboard navigation unit that determines a vehicle's absolute position without GPS, satellites, ground stations, or other external signals. Designed to maintain positioning accuracy without cumulative drift over time or distance, the technology addresses navigation challenges in environments where GPS is unavailable or unreliable. Potential applications include underground mines and tunnels, drones operating beyond visual line of sight, and ships and trains vulnerable to signal jamming or spoofing. The technology aims to overcome the limitations of conventional inertial navigation systems, which accumulate positioning errors over time.

linkedin.com/vayuraqnav



/in/harileenkumar

## HarileenKumar Gurunathan

**Founder and Chief Executive Officer**

**Association: Berliner Hochschule für Technik (BHT)**

HarileenKumar focuses on translating scientific and laboratory advances into reliable, field-ready engineering solutions. As a startup founder, he is developing navigation technologies that provide absolute positioning without relying on Global Positioning System (GPS) signals or external infrastructure. He holds a bachelor's degree in Electrical and Electronics Engineering and a master's degree in Scientific Instrumentation from Ernst-Abbe-Hochschule Jena and is currently pursuing an MBA at Berliner Hochschule für Technik.

## Renatrix

develops advanced biomaterials based on the extracellular matrix (ECM), the natural structure that surrounds and supports cells within tissues. Its tissue-specific ECM biomaterials recreate key biological signals of native tissues, enabling researchers to develop more realistic and reproducible 3D cell cultures, organoids, and tissue models. Unlike conventional materials such as collagen or Matrigel, Renatrix's platform is designed to provide tissue-specific biological cues while offering consistent quality, scalability, and affordability. The platform can be produced in different formats, including hydrogels, pregels, lyophilized powders, membranes, and scaffolds. Renatrix's initial targets are research and biotechnology applications, with future potential in medical devices and regenerative medicine.

RENATRIX

www.renatrix-bio.com/



/in/komali-valishetti

## Dr. Komali Valishetti

**Co-Founder**

**Association: Science & Startups (Berlin), Freie Universität Berlin**

Komali is a molecular biologist and entrepreneur with over six years of research experience and more than two years of experience in venture building and business development. Her work bridges life sciences and entrepreneurship. As the co-founder of Renatrix, an early-stage deep-tech startup, she leads business development, commercialization, market entry strategy, partnerships, and fundraising. Her interests focus on translating innovative biomaterials research into scalable solutions for biomedical applications. She has a PhD in Biology from Technische Universität Braunschweig.

## Biocompile

is an AI-native research workspace designed to accelerate life sciences and biotechnology research and development. Its context and intelligence layer-based platform connects scientific literature, data, analyses, and research decisions in one place, addressing the fragmentation of knowledge across spreadsheets, exports, and publications. Its AI-powered capabilities support database searches, bioinformatics workflows, and the generation of DNA sequences, protocols, figures, and reports, with answers linked to their sources. Originating from research at the Quantitative Biology Center (QBiC), University of Tübingen, Biocompile is supported by the EXIST and Junge Innovatoren programmes.

BIOCOMPILE

www.biocompile.com



/in/max-bode

## Maximilian Bode

**Co-Founder and Chief Product Officer**

**Association: University of Tübingen**

Maximilian focuses on making fragmented scientific data usable by connecting all knowledge in one place to accelerate idea to real-world impact. He co-founded Biocompile after participating in the Cyber Valley AI incubator and discovering an interest in synthetic biology. As the Chief Product Officer, he focuses on making scientific data more accessible and connected to accelerate research and innovation. He holds a bachelor's degree in Business Information Systems and a master's degree in Technology Entrepreneurship, with his thesis examining business model patterns in AI and biomanufacturing.

## inContAlert

develops a patented, light-based wearable device to help individuals with neurogenic bladder dysfunction monitor bladder fullness and decrease the risk of bladder overfilling or unnecessary catheter use. The device uses harmless near-infrared (NIR) light to measure bladder fullness non-invasively through the skin. Currently undergoing advanced testing, the technology aims to improve monitoring accuracy and reliability in real-world settings, supporting safer and more effective continence management.

inContAlert

www.incontalert.de



/in/pascal-helmut

## Pascal Helmut Karl-Heinz Fechner

**Co-Founder and Chief Data Officer**

**Association: University of Bayreuth**

Pascal Fechner is currently pursuing a PhD at the University of Bayreuth, where he co-founded inContAlert as a university spin-off. Through the deep-tech startup he is developing wearable technology for continence management in individuals with neurogenic bladder dysfunction. Specialising in data analytics and deep learning, he leads the development of the algorithms underpinning the company's technology. He also serves as Founding President of the nonprofit Bayreuth AI Association e.V., promoting accessible artificial intelligence education and community engagement.

## Aulixir Therapeutics

is an emerging research-based startup developing safer and effective treatments for severe fungal infections. Its lead product is a nanoparticle-enabled formulation of amphotericin B. Originating from research at the Max Planck Institute of Colloids and Interfaces, the product is supported by a filed patent and has demonstrated activity against fungal pathogens, clinical isolates, biofilms, and intracellular infections, alongside reduced toxicity in preliminary studies. It has also shown activity against *Leishmania* and is currently at TRL 3-4. Aulixir is also developing next-generation antifungal discovery approaches, including RNA therapeutics against new fungal targets.

AULIXIR THERAPEUTICS

linkedin.com/company/aulixir



/in/chandradhish

## Dr. Chandradhish Ghosh

**Co-Founder and Chief Executive Officer**

**Association: Max Planck Institute of Colloids and Interfaces**

Dr. Chandradhish is a chemical biologist and antimicrobial drug-discovery scientist, working at the intersection of chemistry, microbiology, RNA biology, and translational therapeutics. During his PhD in India, he developed antibacterial and antifungal agents targeting drug-resistant pathogens. His subsequent research at the Max Planck Institute of Colloids and Interfaces focused on nanoparticle-based formulations to improve amphotericin B to reduce toxicity while retaining activity against fungal biofilms and intracellular infections. His work at the Helmholtz Institute for RNA-based Infection Research (HIRI) involved developing RNA-targeted antimicrobials and tools to improve antisense delivery into bacteria. After gaining experience in innovation scouting, due diligence, and external R&D at Aurobac Therapeutics, he is now building Aulixir Therapeutics to translate antifungal research into new therapies.

## Startup Idea

Development of an AI-Driven Transport Simulation and Scenario Evaluation Platform. The proposed platform uses AI-based surrogate models, including graph neural networks and physics-informed AI to accelerate computationally intensive transport simulations. It enables rapid evaluation of mobility and sustainability scenarios involving travel demand, transport networks, and policy changes. Initial prototypes have been demonstrated through proof-of-concept studies using real-world transportation data. Currently at TRL 3-4, the research focuses on improving model transferability and validation, while expanding applications to network resilience and transport equity. The long-term goal is to develop a scalable decision-support platform for cities, transport authorities, mobility operators, and engineering consultancies.



/in/santhanakrishnan

**Dr. Santhanakrishnan Narayanan**
**Postdoctoral Researcher**
**Association: Technical University of Munich**

Santhanakrishnan is a postdoctoral researcher at the Technical University of Munich, working at the intersection of transportation systems, artificial intelligence (AI), and computational modelling. His research focuses on AI-enabled methods for smart and sustainable mobility, including graph neural networks, physics-informed AI, machine learning, and large language models. Drawing on experience from European research projects, he develops scalable AI-based models to accelerate transport simulations and support the evaluation of mobility and sustainability scenarios with the aim of translating research into practical decision-support tools.

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