



NEW HORIZONS IN AVIATION AND SPACE







Because we network leading players in the aerospace industry. Because we initiate research partnerships. Because we offer outstanding career development opportunities for young academics.

Munich Aerospace – accelerating the pace of research. Because a consortium provides the thrust required to glimpse new horizons.











der Bundeswehr Universität 🚱 München





BAVARIAN RESEARCH NETWORK

MUNICH AEROSPACE

MUNICH AEROSPACE IS A BAVARIAN NETWORK FOR RESEARCH, TRAINING AND CONTINUING EDUCATION.

Formed as a non-profit organisation in 2010 by its four members

- Technical University of Munich

- Bundeswehr University

- the German Aerospace Center including Institutes at Oberpfaffenhofen

- Bauhaus Luftfahrt

Munich Aerospace is sponsored by Free State of Bavaria.

THE ORGANISATION'S MISSION INCLUDES

- Developing and managing a research network - Awarding doctoral scholarships - Coordinating education offerings - Networking beyond national borders

Prominent scientists and academics, business leaders and political figures set the strategic tone for Munich Aerospace as members of the organisation's four governing panels: the Executive Board, the Scientific Advisory Board and the Board of Trustees and as vote holders at its General Assembly meeting.

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RESEARCH

MUNICH AEROSPACE IS PARTICULARLY DEDICATED TO PROMOTING THE EXCHANGE OF IDEAS BETWEEN MEMBERS OF THE RESEARCH, TEACHING, GOVERN-MENT AND BUSINESS COMMUNITIES.



FOCUS ON RESEARCH PARTNERSHIPS

RESEARCH

MUNICH AEROSPACE

MUNICH AEROSPACE RESEARCH GROUPS WORK IN THREE PRINCIPLE AREAS:

SPACE FOR EARTH	MOVING PEOPLE	[(
Key topics: - Earth Observation - Safety in Orbit	Key topics: - Autonomous Flight - Aviation Management - Urban Air Mobility - Green Aerospace	- Cybe Co 8
DIGITALISATION & NETWOR		

Constituted of research professionals from at least two out of the four consortium members of Munich Aerospace, the research groups are open to partnerships with external research institutes and private enterprises.

Since 2010, Munich Aerospace has supported 17 aerospace research groups, including:

- Modelling, Simulation, Optimisation and Concepts of Urban Air Mobility Transport Systems
- Data-driven Aviation Management
- Propulsion Technologies for Green In-Orbit Spacecraft
- Space Debris Detection, Avoidance, Removal
- Efficient Coding and Modulation for Satellite Links with Severe Delay Constraints
- Certifiable Autonomy in Unmanned Aerial Vehicles
- Immersive Visual Information Mining for the TerraSAR-X/TanDEM-X Archive

DATA FOR CITIZENS

Key topics: r & Public Security - Aerospace mmunications & Navigation

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Munich Aerospace makes possible the formation of interdisciplinary research groups involving prominent experts from the Munich area. Exchanging knowledge generates exciting synergies, enabling us to approach questions from various perspectives.

> Prof. Xiaoxiang Zhu, Munich Aerospace-Head of Research Group



EXCELLENCE IN TEACHING: ONLINE AND OFFLINE

MUNICH AEROSPACE

MUNICH AEROSPACE COORDINATES AND HOSTS CONTINUING ACADEMIC EDUCATION AND TRAINING OFFERINGS AND EVENTS FOR STUDENTS, DOCTORAL CANDIDATES AND SKILLED PROFESSIONALS.

This offering includes the international eLearning platform Global Aerospace Campus, an aerospace graduate school for doctoral candidates, a master's level teaching partnership between the Technical University of Munich, the Bundeswehr University and select presentation and lecture series conducted by the Association's members.



The Global Aerospace Campus has served to connect Bavaria's aerospace industry with scientists from all over the world since 2016. The Campus' mission is to enhance and promote internationalism and virtual teaching by Bavarian academics.

Annual conferences for sharing scientific knowledge are attended by academics from Bavaria, Québec/Canada, São Paulo/Brazil, Georgia/USA, Western Cape/South Africa, Shandong/China and Upper Austria. Outside of such opportunities to meet up personally, they can interact in online courses like "Digitalisation in Aeronautics and Space" via an eLearning platform.

http://global-aerospace-campus.org/







OPPORTUNITIES THROUGH PROMINENT PARTNERS

MUNICH AEROSPACE

Munich Aerospace supports young scientific talent by awarding doctoral scholarships and offering an Aerospace Graduate School for doctoral candidates.

DOCTORAL DEGREE SCHOLARSHIP

Scholarship recipients are part of an accredited Munich Aerospace Research Group and attend the Association's own Graduate School. They generally receive three-fold support: from their doctoral supervisor, from the head of the respective research group and from the Munich Aerospace Administrative Office. Munich Aerospace scholarship recipients may also benefit from corporate grants.

GRADUATE SCHOOL

The Munich Aerospace Graduate School is especially designed for the Association's network of research and industry partners. This includes summer school seminars on select topics – such as Space Debris, Green Aerospace and Urban Air Mobility –, tours of our partners' facilities and courses offered by the TUM Graduate School and through the DLR_Graduate_Program.



GET INFORMATION ABOUT THE MUNICH AEROSPACE SCHOLARSHIP FUND.



https:// www.munich-aerospace.de/ en/sponsorship

RESEARCH AND INNOVATION HUB



MUNICH AEROSPACE

THE LUDWIG BÖLKOW CAMPUS IS A LOCATION FOR CUTTING-EDGE AEROSPACE RESEARCH, TEACHING AND ENTREPRENEURSHIP.

The Association supervises and oversees on-campus academic activities:







The Ludwig Bölkow *Campus forms a unique* ecosystem of science, business and start-ups. It serves as a springboard for development in a spectrum of futurerelevant areas, including data-driven artificial intelligence solutions for the approval of autonomous systems and related software, physical products such as cuttingedge micro launchers and cognitive antenna-radio systems.

> Prof. Rudolf F. Schwarz Managing Director, iABG

