

AYŞE TEMİZ

COMPETENCIES

System Engineering, Product Development Processes, Process Analysis and Modelling, Technology Management, CM2, Specialty Engineering, Airworthiness and Certification, Design Organization Approval (DOA), Design Quality Assurance, Structural Design, Aircraft Component Manufacturing.

PROFESSIONAL EXPERIENCES

CONSULTANT – Sempro Consulting and Engineering

2021-Present

- Providing consultancy services to engineering firms in systems engineering and product development processes.
- Instructor of Systems Engineering and Process Management trainings.

ENGINEER – Turkish Aerospace

1991-2021

Technology Management Department Manager (2017-2021):

- Leading technology management department
- Responsible for determination of company technology strategies and managing technology roadmap studies
- Managing scientific and technological collaborations with all stakeholders
- Coordinating Technology Advisory Board
- Company R&D Coordinator
- Member of IP Board
- Member of Defence Industry Agency (SSB) Composite Focus Technology Network Coordination Committee (2018).
- Member of NATO-SAS 123 Futures Assessed alongside socio-Technical Evolutions (FATE) (Évaluation du futur et des évolutions socio-techniques (FATE)) Research Task Group.
- Project Manager of TUBITAK SAYEM Project titled 'Technology Roadmap and Innovation Network for Rotorcraft UAVs' (June 2019 – February 2020).
- Mentoring two female undergraduate students (2020 and 2021).
- Jury Member of Teknofest Aviation and Technology Festival Flying Car Competition, 2019

Technology Capability Management Chief (2014-2017):

- Leading technology capability management section
- Responsible for determination of technology strategies by coordinating all related stakeholders
- Responsible for preparation and coordination of TAI Technology Roadmap
- Coordinating Technology Acquisition Plan and monitoring technology acquisition
- Coordinating technology maturity assessment of R&D projects.
- Conducting patent engineering activities.
- Taking an active role in the SSM Technology Readiness Level Guideline preparation studies.
- Participating TAI Knowledge Management Studies
- Active participation in the preparation studies of Defence Industry Agency Technology Taxonomy Document (version 1.0, May 2017) conducted by Defence Industry Agency
- Active participation in the establishment of Technology Readiness Level Guide for Defence Industry Agency (2015)

Specialty Engineering Chief (2011-2014):

- Leading “reliability and testability” and “system safety” disciplines in aircraft group.
- Responsible for combat aircraft technology management studies.
- Participating Erciyes C130 Avionic Modernization Project Environmental Qualification activities.

Product Integrity Chief (2007-2011):

- Head of Office of Airworthiness in Integrated Aircraft Group.
- Responsible for Hürkuş Project and Erciyes C130 Avionic Modernization Project DOA activities
- Leading “reliability and testability”, “system safety”, “engineering process assurance” and “airworthiness and certification” disciplines in integrated aircraft group.
- Leading TAI product development processes establishment studies.

- Safety Review Board Coordinator.
- Responsible for performing TAI technology competency studies in years 2008 and 2010
- Participating TAI Knowledge Management Studies such as establishment of TAI terminology database, lessons learned database.

Airworthiness and Certification Leader (2006-2007)

- Head of Office of Airworthiness in A400M Project.
- Responsible for the management of Certification, Continued Airworthiness and DOA activities within TAI.

Systems Engineering Leader (2005-2006)

- Responsible for management of Systems Engineering activities; Requirement Management, Validation & Verification and Risk Management.

Design Quality Assurance Leader (2003-2005)

- Establishing, performing and maintaining the processes required for the Design Quality Management System and deploy the methods and tools in order to monitor, measure and improve these processes.
- Participating in A400M Aircraft FCF, EED, PD, UEED, TC, Section A Upper Shell, Aileron and Spoiler Design Reviews in each milestone and preparing Organisation Notes and minutes of meetings of each review.
- Performing Design and Engineering process audits
- Coordinating Design and Engineering Quality Management Reviews
- Establishing and managing a corrective action system in order to monitor that Design Assurance System is compliant with the documented procedures.

Airworthiness and Certification Engineer and Systems Safety Engineer (2001-2003)

- Responsible for preparation of certification basis for A400M Aircraft FCF, EED, PD, UEED, TC, and Section A Upper Shell components.
- Participating in establishing of Airworthiness and Certification Procedures
- Participating in preparation activities for Airbus Design Organization Approval Audits
- A400M Safety Specialist and a member of Airbus Safety & Reliability Committee
- Responsible for preparing TAI contribution to A/C level FHA document and Common Data Document
- Responsible for preparing ATA 33 and ATA38 Safety/Reliability Requirement Document and Safety/Reliability Plans.

Design Engineer, Structural Design (1998-2001)

- Responsible for design of ZIU aileron assembly and detail parts, hanger and pitot static tube installation
- Responsible for preparation of CAD Standard and Design Manual specific for ZIU project
- Responsible for coordination of Structural Design activities in CN235 Modernization Project.
- Responsible for preparation of A400M Nose Landing Gear Bay and Door Preliminary Concept Design in Aerospatiale facilities in Toulouse / France.

Foreman, CN235 Rear Fuselage (1995-1998)

- Responsible for manufacturing of 22 CN235 Rear Fuselage with 17 technicians.

Foreman, CN235 Center Fuselage (1993-1995)

- Responsible for manufacturing of 13 CN235 Center Wing with 13 technicians.

Production Specialist, CN235 Assembly and Fields Operations (1992-1993)

- Responsible for solving technical problems appeared during CN235 production
- Member of Change Implementation Board as a representative of CN235 Assembly and Fields Operations

System Specialist, CN235 Assembly and Fields Operations (1991-1992)

- Responsible for leading CN235 Final Assembly hydraulic, fuel, pneumatic and flight control system functional test team.
- On-the-job training in CASA / Spain Sevilla premises related CN235 A/C.

MAINTENANCE ENGINEER – Eskişehir hava İkmal Bakım Merkezi (EHİBM)

1991-1991

- Responsible for preparing F4 aircraft maintenance plans and solving technical problems during maintenance.

CERTIFICATES

Appointment with Patent Training / Turkish Patent Institute

Simulation, Control And Flight Test Of Mass-Actuated UAV Training / University of Texas Arlington
Management of IP and Commercialization Training / Turkish Patent Institute
IP Rights: Basic Aspects and Patent Procedures Training / Turkish Patent Institute
International Traffic In Arms Regulations (ITAR) Training / Goforth Trade Advisors LLC
Innovation Management in The Technology Era / Portland International Conference on Management of Engineering and Technology (PICMET)
Horizon Scanning And Strategic Future Analysis / NATO STO Lecture Series IST-135 at HAVELSAN
Technology Intelligence Training / Portland State University
Technology Management Training/ Sabancı University
Mission Success First: Lessons Learned Training / Aerospace Engineering Association (AEA)
Technology Management (Especially Usage of Technology Readiness Level Metric) / TEKIM
Flight Safety Analysis Methods Training, Airbus
Full Change Process, Airbus
Design Organization Approval (DOA) Training / ENAC, Italian Civil Aviation Authority
Structural Engineering Training /BOEING
Integrated Product Team (IPT) Training / BOEING
EDS/UNIGRAPHICS Training / Boğaziçi Yazılım
CADD55 Training / DataServ
CATIA training / Grup Otomasyon
CN-235 Light Light Transport A/C Training / CASA

EDUCATION

1984 – 1990 Bachelor of Science Degree

Middle East Technical University, Ankara
Faculty of Engineering
Aeronautical Engineering

LANGUAGE SKILLS

Turkish (native)

English (*Advanced Level – Reading, Writing, Speaking*)

Spanish (*Intermediate Level – Reading, Writing, Speaking*)

French (*Beginning Level – Reading, Writing, Speaking*)

PUBLICATIONS

Futures Assessed alongside socio-Technical Evolutions (FATE): Final report of the SAS-123 Research Task Group, Gitanjali Adlakha-Hutcheon, Dr. Kerry FOSHER, Marcel-Paul Hasberg, Anna Lindberg, James Maltby, Christian Molder, Thomas Galasz Nielsen, Gabriele Rizzo, Silke Roemer, Ayse Temiz and Mark Tocher, TR-SAS-123, (2021).

Market and Technology Linkage in Technology Road Map (in Turkish), Haydar Can Coşkun, Arda Peker, Deniz Özel and Ayşe Temiz, 8th National Aerospace Conference, Ankara, (2020)

The Benefits of Additive Manufacturing Technologies for Defense and Aerospace Sector (in Turkish), TUSAŞ MAG Issue 112, (2019).

“Alice” in Paris (in Turkish), TUSAŞ MAG Issue 111, (2019).

TRIZ, – Technology for Innovation (in Turkish), TUSAŞ MAG Issue 110, (2019).

Turkish Aerospace R&D and Technology Studies (in Turkish), Journal of “Mühendis ve Makina Güncel”, Volume: 60 Issue:712, (2019).

Turkish Aerospace Industry-Focused Undergraduate Study Completion Projects (in Turkish), Merve Ayas, Kemal Mersin and Ayşe Temiz, Journal of “Mühendis ve Makina Güncel, Volume: 60 Issue:712, (2019).

The Importance of Collaboration for Innovation and Technological Development (in Turkish), TUSAŞ MAG Issue 108, (2019).

Thermoplastics: an overview for Aerospace World (in Turkish), Deniz Özel and Ayşe Temiz, 7th National Aerospace Conference, Samsun, (2018).

The Industry Perspective of University Industry Collaboration: Recommendations for Aerospace Industry Applications (in Turkish), K. Sinem Şimşek, Onur Jane and Ayşe Temiz, VII. National Aerospace Conference, Samsun, (2018).

Defense Industry Restrictions and Indigenization Activities (in Turkish), Dilek Zengin, M. Erdem Çorapçioğlu and Ayşe Temiz, VII. National Aerospace Conference, Samsun, (2018).

Patent 4.0 in Aerospace Industry (in Turkish), Kasım Peker and Ayşe Temiz, VII. National Aerospace Conference, Samsun, (2018).

Patent Valuation Methodology for Aerospace and Defense Industry (in Turkish), Kasım Peker and Ayşe Temiz, VII. National Aerospace Conference, Samsun, (2018).

Technology Roadmap and Acquisition Plan Establishment Methodology for Aerospace Industry, Ayşe Temiz, H. Tolga Göksidan and M. Erdem Çorapçioğlu, IX. National Aircraft and Aerospace Convention, Ankara, (2017).

Technology Readiness Level (TRL) Methodology for Aerospace Applications (in Turkish), Ayşe Temiz and Mehmet Erdem Çorapçioğlu, SAVTEK, Ankara, (2016).

Effective and Sustainable R&D Applications Approach in Defense Industry (in Turkish), Hakan İşçi, Ayşe Temiz and M. Erdem Çorapçioğlu, Turkish Defense Industry R&D and Technology Conference, Ankara, (2016).

A Product Based Strategic Technology Management Methodology for Developing Countries, Ahmet Üçer, Bilge Yiğit and Ayşe Temiz, Int. Journal of Innovation and Technology Management, Vol.13 Issue 2, 1650001, (2015).

Product Based Technology Management Methodology (Jet Training Aircraft and Combat Aircraft Application -in Turkish), Ahmet Üçer, Bilge Yiğit and Ayşe Temiz, Air Force Academy II. National Conference for Advanced Technologies in Aviation (HİTEK), (2014).

Environmental Qualification Activities in Aircraft Development (in Turkish), Ayşe Temiz and Yalçın Buz, Air Force Academy II. National Conference for Advanced Technologies in Aviation (HİTEK) (HİTEK), (2014).

A Methodology for Defense Companies to Determine their Technological Competence (in Turkish), Özcan Ertem, Ahmet Üçer, Bilge Yiğit and Ayşe Temiz, UCTEA Chamber of Mechanical Engineers, 6th National Aircraft and Aerospace Conference (UHUM), (2011).

A Methodology for Defense Companies to Determine their Technological Competence (in Turkish), Ahmet Şevket Üçer, Özcan Ertem, Ayşe Temiz and Ülgen Cezayirlioğlu, 5. Ankara International Aerospace Conference AIAC-2009-122 - METU, Ankara, (2009).

Assessment of Turkish Aerospace Airworthiness & Certification Activities and Recommendations for Future Projects (in Turkish), Ayşe Temiz, Oya Tansu, Segah Özdemir and other, SSM 3rd Quality Conference, Ankara, (2008).

Evaluation of Turkish Aerospace Design Organization Certification Activities and Recommendations for Future Projects (in Turkish), Ayşe Temiz, UCTEA Chamber of Mechanical Engineers, 4th National Aircraft and Aerospace Conference (UHUM), (2007).