

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Enabling the Future - Developing the Space Workforce (5)

Author: Mr. Ozan Kara  
Koc University, Turkey, okara13@ku.edu.tr

Mr. Ryoma Yamashiro  
Japan Aerospace Exploration Agency (JAXA), Japan, yamashiro.ryoma@jaxa.jp

Mr. Taylor Burgett  
New Mexico State University, United States, burt2012@nmsu.edu

Mr. Ji Hyun Park  
Seoul National University, Korea, Republic of, snug88@snu.ac.kr

Ms. Luise Weber-Steinhaus  
Member Women in Aerospace (WIA-Europe), Germany, luisews@gmail.com

Mr. KINGSLEY OGOCHUKWU UKAEGBU  
Nigeria, kukaegbu53@yahoo.com

MAIN CIRCUMSTANCES FOR THE NEXT GENERATION WORKFORCE: HOW DO YOUNG  
PROFESSIONALS ENTER AND GROW INTO THE SPACE SECTOR?**Abstract**

The private sector has incremental responsibilities to foster innovations in the space sector. New responsibilities require well-educated, disposed and representative young people for the space sector. Therefore, entering and growing into the sector is one of the crucial issues which all young professionals are always facing. We discussed this significant concern at the IAC2014, IPMC Young Professional Workshop, in Toronto, Canada. Possible career paths, circumstances, advantages and challenges working for academia, industry and government were considered. Briefly, academia ensures intellectual freedom since YPs can be part of designing concepts, making computations and system engineering trainings. The private sector bridges over between academia and government for YPs. Working in the government provides an advantages involving hands-on work with the new technologies. Our main discussion approaches were constituted in two perspective; individual and common aspects. Due to our personal experiences we came up discussion points such as (1) circumstances before/after becoming YP, (2) importance of K12 education, (3) overview of German space industry: activities of Airbus, DLR and ESA and (4) workforce supply/demand analysis by the instance of the JAXA. In addition, common aspects included (1) political and sociological issues, (2) lack of corporations in developing countries, (3) boss – YP relations and (4) career paths transition from student to become an YP. Personal aspects presented that a great way for teaching K-12 students relevant skills is to have university students and young professionals helping the in classrooms. Overview of Germany showed that international activities pave the way students to become YPs. Furthermore, language courses, space engineering courses and diverse engineering courses in the Airbus are pertinent examples for YPs to grow into the sector. Due to the workforce supply/demand analysis, while the supply for workforce increases, the demand doesn't change. That makes it difficult for the students to get a job in space sector. Common aspects brought to an end that in the less development countries, sociological conditions and internal policies generally create lack of private industry and restrict improvement of next generation workforce. Young professionals whose bosses are interactive, social, and trustable, sympathizer feel more comfortable during the working periods. Finally, project-based undergraduate education brings students new competencies to become YPs.