

## Half-day workshop

# Equipment Protection using Shielding, Banding, and Grounding

حفاظت تجهیزات با بهره‌گیری از شیلدینگ، هم‌بندی و زمین کردن

**Lecturer:** Mr. Amir shafeie ,Nian Electronic Company

**Description:** This presentation is about grounding, banding, and shielding the conductors and appears useful for those who are curious about the state of the art approaches in this field of area in electrical engineering. However, in the past not too much attention was paid on it, but considering the massive amount of current industrial projects and today's technology the importance of this field of electrical engineering has been inevitable. This presentation is aimed on clarifying the importance of this issue for the attendees using a simple language and it tries to propose some routines in order to protect the sensitive equipment against the destructive impact of lightning and electromagnetic pulses threat.

**Main topics:**

- Grounding System and Protection Methods
- Lighting Surge Protection
- Electromagnetic Pulse(EMP)



**Amir Shafeie** was born in Mashhad, Iran, in 1983. He received the B.Sc. degree in Power Systems engineering from Azad university of Bojnord, Iran, and the M.Sc. degree in Automation and Control engineering from Khorasan University of Higher Education, Mashhad, Iran respectively in 2003 and 2007. From 2010 to 2013, he was a Lecturer in Electrical Engineering Departments of different Mashhad Technical Colleges where he used to teach various courses of industrial electricity and meanwhile as a member of Construction Engineering Organization of Khorasan Razavi for supervision of electrical installations he used to design and execute several high voltage and medium voltage projects in Mashhad. In 2009 he joined the R&D department of Nian electronic company as an electrical designer where he designed and executed miscellaneous electrical projects such as Concentrated Power Supply Racks, High Capacity Power Supply Racks, Compact Power Supply Racks, and Outdoor Power Supply Racks, etc. He was a member of best R&D committee in Emtenan festival, Iran in 2012, a member of Iran's best R&D department from Iran's Ministry of Industry, Mining and Business in 2014, a member of Khorasan province best R&D department from Khorasan Construction of Industries and also a member of Khorasan province best R&D department from the fourth festival of Research and Innovation both in 2015. Currently he still is a member of R&D department in Nian electronic company.