

KORUZA Workshop: Wireless optical communication for scientific experimentation

Wireless optical communications have become a significant research topic in the past years and are gaining significance for industrial use. We have launched the **workshop focused on experimental construction and testing of wireless optical systems** to empower participants in their research by creating open source open hardware wireless optical system KORUZA to gain necessary skills in equipment construction.

With this testbed platform you can effectively create operational links by modifying only the components of your interest. During a week long workshop we will take you step-by-step through assembly of KORUZA, teach you basics of 3D modeling and modification of the assembly for your own purposes and conclude with atmospheric attenuation testing in our 50 m long fog tunnel, characterizing built devices in fog and smoke.

PROGRAMME

Monday, 21st November:

Intro to wireless optical communications and technology overview

Tuesday, 22nd November:

KORUZA sub-assemblies preparation and transceiver preparation

Wednesday, 23rd November:

KORUZA final assembly and control system testing

Thursday, 24th November:

KORUZA calibration and data collection for scientific applications

Friday, 25th November:

KORUZA testing in fog tunnel and other measurements

WHEN? 21-25/11/2016

WHERE? Maribor, Slovenia, Europe

COST? 2000,00 EUR

The price includes all parts required to assemble one fully operational KORUZA 1.0 optical link, excluding any accommodation and travel costs.

Applications can be made at Fabrikor or via email info@irnas.eu.

ABOUT KORUZA

KORUZA is a low cost, open source and open hardware, wireless optical system, enabling 1 Gbps / 10 Gbps networking connectivity for locations up to 150 m apart, using an eye-safe infrared light beam.

It innovates the design of a free-space optical communication system reusing mass produced Small Form-factor Pluggable (SFP) electro-optical transceivers, combining the latest advances in low-cost 3D printing using the Fused Deposition Modelling (FDM) method with bare-minimum custom electronics design.

FEATURES:

- Innovative use of commonly available parts.
- 3D printable and modular design.
- DIY friendly, open and useful source.
- Easy to modify and adapt, providing a platform for experimentation.
- Integrated with Nodewatcher monitoring and data collection system.

See KORUZA.NET to find out more. If you have any additional questions or require more information contact us via email - info@irnas.eu.

