

Nano-Argovia projects 2025

Newly started projects

Project	Principal Investigator	Project partner
20.3 Nano Diffractive Optics – Nano structured Fresnel axicon lens for ultrahigh resolution Optical Coherence Tomography (OCT) and large size, high efficiency gratings for ultrafast chirped pulse amplified lasers	B. Resan (FHNW Windisch)	A. Trisorio (PSI) G. Perren (XRnanotech AG, Untersiggenthal)
20.4 Na-LTS – Nano-Optimierte Trägermaterialien für Effizientes Laser Tissue Soldering	F. Koch (Thommen Medical AG, Grenchen)	M. de Wild (FHNW Muttenz) L. Kind (FHNW Muttenz) O. Germershaus (FHNW Muttenz) R. Holtz (FHNW Windisch)
20.5 NanoPED Nano-structured resorbable pediatric implants	R. Marek (FHNW Muttenz)	M. de Wild (FHNW Muttenz) V. Novak (ANAXAM) C. Chang (ANAXAM) L. Berger (Kairos Medical AG, Bettlach) S. Matter (Kairos Medical AG, Bettlach) A. Alfieri (Kantonsspital Winterthur) M.-E. Halatsch (Kantonsspital Winterthur)
20.8. QAMP – Low noise Quantum-limited traveling wave parametric amplifier	C. Schönenberger (Univ. Basel)	A. Hofmann (Univ. Basel) M. Gabureac (PSI) V. Guzenko (PSI) C. Jünger (YQuantum GmbH, Villigen) J. Herrmann (YQuantum GmbH, Villigen)
20.9. SENAMAG – Selective nano magnetic detector for water pollution	J. Pascal (FHNW Muttenz)	O. Tagit (FHNW Muttenz) S. Gorenflo (FHNW Windisch) D. Matter (Mems AG, Brugg)

Prolonged projects

(with financial support and report in the scientific supplement)

Project	Principal Investigator	Project partner
19.1 BatCoat – Development of functional nano-layers for Gen 4 anode-less all-solidstate batteries	M. El Kazzi (PSI)	K. Löffel (FHNW Windisch) S. P. Kumar Yalamanchili (Oerlikon Metco AG, Wohlen)
19.3 HiZfEM – High-Z sensors for electron-microscopy	D. Greiffenberg (PSI)	J. P. Abrahams (Univ. Basel) S. Fernandez (Dectris AG, Baden-Dättwil)
19.5 NANodePET – Nanobiocatalysts for sustainable PET recycling solutions	P. Shahgaldian (FHNW Muttenz)	M. Grob (FHNW Windisch) M. R. Correro (Inofea AG, Muttenz)
19.7 ProtEDinNanoxtals – Advancing Electron Diffraction: unveiling hydrogen's role in protein-ligand interactions through protein nanocrystals	V. Panneels (PSI)	J. P. Abrahams (Univ. Basel) M. Henning (leadXpro AG, Villigen) G. Steinfeld (ELDICO Scientific AG, Allschwil)
19.11 ZIRYT – Nano-structuring ZIRconia by YTriadoping and heat-treatment to influence cell response	N. Rohr (UZB)	M. de Wild (FHNW Muttenz) R. Wagner (Institut Straumann AG, Basel)