

Relevant experience of Dimitri Roditchev in building high precision cryogenic systems:

	Item, specifications - work done by D.R. - <i>status</i>	Year	(Location) Research work of
1.	Cryostat 2.5-300K for the very first French low temperature STM (M1) - concept and design, tuning, use - <i>occasionally used</i>	1993-1995	(GPS, Paris, France) PhD P. Mallet Dr. W. Sacks Prof. J. Klein D.R.
2.	First French optical axis 6K cryostat for Micro-photoluminescence experiments with sub 100nm resolution - concept and design, machinery (partial), tuning - <i>still in use</i>	1993-1994	(GPS-INSP, Paris, France) PhD T. Guillet PhD J. Belessa Dr. V. Voliotis Dr. R. Grousseau Dr. Th. Barizien Dr. L. Legrand
3.	Horizontal optical axis 4mm frontal distance 6K cryostat for Micro-photoluminescence experiments with sub 100nm resolution - concept and design, tuning (contract via UPMC, 2 different units sold to Japan) - <i>still in use</i>	1996-2003	(AIST, Tsukuba, Japan) Dr. K. Komori Dr. X. Wang
4.	2.5-30K, 5T HV home-made STM/STS system (M2) : STM head, HV environment, cryostat 2.5-30K with SC magnet - concept and design (all parts), machinery (STM head), realization (all parts except user interface), tuning (all parts), use - <i>in use</i>	1994-2000 Revised: 2011-2012	(GPS-INSP, Paris, France) PhD T. Cren PhD R. Lamy PhD Th. Proslie Post-Doc A. Kohen ATER N. Bergeal ATER A. Zimmers Dr. Y. Noat Dr. W. Sacks Prof. J. Klein D.R.
5.	Aberration-free large aperture 2-5K optical cryostat for optical emission diagram wide angular measurements - concept and design, tuning (contract via UPMC, 1 unit sold to Switzerland) - <i>still in use</i>	2004-2005	(LPN at EPFL, Lausanne, Suisse)
6.	3 optical axe 6K-20K cryostat for Micro-photoluminescence experiments with sub 100nm resolution - concept and design, tuning - <i>main equipment, in use</i>	2000-2003	(GPS-INSP, Paris, France) PhD F. Dubin PhD A. Enderlin PhD C. Tonin Dr. R. Hostein Dr. V. Voliotis Dr. R. Grousseau
7.	Room temperature horizontal 30mm access 5T cryostat for diffraction-limited Faraday microscopy experiments - concept and design, machinery (partial),	2004-2007	(GPS-INSP, Paris, France) Dr. L. Thevenard Dr. C. Gourdon

	tuning - <i>still in use</i>		
8.	Vertical (bottom access) optical 2K-sample in liquid cryostat for Micro-RAMAN experiments (with original constrain-free windows mounts) - concept and design, tuning - <i>main equipment, in use</i>	2005-2007	(INSP, Paris, France) PhD Dr. F. Perez Dr. B. Jusserand
9.	0.3-20K, 8T UHV STM/STS with in-situ preparation facility (M3): STM head, UHV environment, He3 refrigerator, cryostat 2.5-30K with SC magnet - concept and design (all parts of the refrigerator except charcoal pump), machinery (STM head, manipulators, environment), tuning (all parts), use) - <i>main equipment, in use</i>	2000-2010	(INSP, Paris, France) PhD V. Dubost PhD Denis Fokin PhD L. Serrier-Garcia PhD C. Carbillet PhD G. Menard Post-Doc V. Cherkez Post-Doc V. Stolyarov
10.	1.3-20K UHV STM-AFM by SPECS (Langevin STM at ESPCI) - design of : preparation chamber, cleaver, sample storage, sample carriage Delivered in Sept.2013 - <i>main equipment, in use</i>	2012-2013	(ESPCI, Paris, France) Dr. H. Aubin Post-Doc V. Stolyarov Dr. S. Pons Dr. A. Zimmers Dr. T. Cren Dr. Ch. Brun Dr. F. Debontridder D.R.
11.	MicroTop: 4 axe 4K closed-cycle optical cryostat for Micro-photoluminescence experiments with sub 100nm resolution and cold optical table - concept, design (partial), tuning (partial) - <i>currently under construction (2012-2014)</i>	2012-2014	(INSP, Paris, France) PhD L. Monniello Dr. R. Hostein Dr. V. Voliotis Dr. R. Grousseau
12.	M2bis: UHV-compatible 1.8K, 2T vertical + 1T horizontal field ; ultra-quiet close-cycle cryostat for combined STM-AFM-Transport device - concept and design (STM head and whole cryo-system) - <i>currently under construction (2009-2014)</i>	2009-2014	(INSP, Paris, France) Dr. T. Cren Dr. Ch. Brun Dr. S. Pons Dr. F. Debontridder D.R.
13.	6 axis motorized feed-back controlled UHV high-precision goniometer for ARPES at T<10K (T=2K is targeted) - concept and design - <i>current project</i>	2012-2015	(ESPCI, Paris, France) Dr. S. Pons Post-Doc V. Stolyarov Dr. T. Cren Dr. Ch. Brun Dr. F. Debontridder Dr. A. Zimmers Dr. H. Aubin Assistant Prof. X (2014) D.R.