

**List of programs and projects financed by Slovenian Research Agency and Ministry of Higher education, Science and Technology which collaborate with NMR Centre at National Institute of Chemistry in 2011**

<b>National Institute of Chemistry</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Program no.</b>
1.	Chemistry and structure of biologically active compounds	Janez Plavec	P1-0242
2.	Folding and dynamics of biomolecular systems	Franc Avbelj	P1-0010
3.	Nanoporous materials	Venčeslav Kaučič	P1-0021
4.	Specialty polymers	Majda Žigon	P2-0145
5.	Micro- and nanostructured functional materials: development, physical-chemical characterization and simulation of processes	Miran Gaberšček	P2-0148
6.	Functional genomics and biotechnology for health	Radovan Komel	P1-0104
7.	Functional food and food supplements	Irena Vovk	P1-0005
8.	Razvoj materialov po sol-gel postopkih in njihova uporaba v sistemih za izkoriščanje nekonvencionalnih virov energije ( <i>Slovene</i> )	Boris Orel	P1-0030
9.	Molecular biotechnology: from dynamics of biological systems to applications	Roman Jerala	P4-0176
<b>#</b>	<b>Project</b>	<b>P.I.</b>	<b>Project no.</b>
10.	NMR študije vloge kationov za zvitje in stabilizacijo kvadrupleksov DNK ( <i>Slovene</i> )	Janez Plavec	J1-0986
11.	Mehanizmi zvitja in agregacije proteinov ( <i>Slovene</i> )	Franc Avbelj	J1-2252
12.	Karakterizacija interakcij ligand-receptor ( <i>Slovene</i> )	Simona Golič Grdadolnik	J1-0317
13.	Priprava eno in več dimenzionalnih nanostruktur polianilina in substituiranih polianilinov v ionskih tekočinah ( <i>Slovene</i> )	Majda Žigon	J2-2406
14.	Novi dentritski polimeri kot nosilci za kontrolirano dostavo zdravilnih učinkovin ( <i>Slovene</i> )	Ema Žagar	L2-2078
15.	Večfunkcionalne nanokompozitne prevleke in premazi ( <i>Slovene</i> )	Boris Orel	L2-2239
16.	Kemijska modifikacija tekstilij z uporabo sol-gel tehnologije ( <i>Slovene</i> )	Barbara Simončič	J2-2223
17.	Napredni materiali za shranjevanje toplotne energije ( <i>Slovene</i> )	Venčeslav Kaučič	J1-3604

<b>Institute Jozef Stefan</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Program no.</b>
18.	Magnetna resonanca in dielektrična spektroskopija pametnih "novih" materialov ( <i>Slovene</i> )	Janez Dolinšek	P1-0125
19.	Light and matter	Martin Čopič	P1-0192
20.	Physics of soft matter, surfaces, and nanostructures	Slobodan Žumer	P1-0099
21.	Experimental biophysics of complex systems	Janez Štrancar	P1-0060
22.	Inorganic chemistry and technology	Boris Žemva	P1-0045
23.	Contemporary inorganic materials and nanotechnologies	Danilo Suvorov	P2-0091
24.	Proteoliza in njena regulacija ( <i>Slovene</i> )	Boris Turk	P1-0140
25.	Kroženje snovi v okolju, snovna bilanca in modeliranje okoljskih procesov ter ocena tveganja ( <i>Slovene</i> )	Milena Horvat	P1-0143
26.	Toksini in biomembrane ( <i>Slovene</i> )	Igor Križaj	P1-0207
27.	Strukturna razlaga visokega dviga encimske aktivnosti sekretornih fosfolipaz A2 v kompleksu s kalmulinom z NMR visoke ločljivosti ( <i>Slovene</i> )	Lidija Kovačič	

<b>Faculty of Chemistry and Chemical Technology, University of Ljubljana</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Program no.</b>
28.	Bioinorganic and bioorganic chemistry	Peter Bukovec	P1-0134
29.	Chemical engineering and technology	Matjaž Krajnc	P2-0191
30.	Physical chemistry	Vojeslav Vlachy	P1-0201
31.	Synthesis, structure, properties of matters and materials	Ivan Leban	P1-0175

<b>Faculty of Pharmacy, University of Ljubljana</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Program no.</b>
32.	Farmacevtska kemija: načrtovanje, sinteza in vrednotenje učinkovin ( <i>Slovene</i> )	Danijel Kikelj	P1-0208
33.	Farmacevtska tehnologija in biofarmacija: od dostavnih sistemov učinkovin do terapijskih izidov zdravil ( <i>Slovene</i> )	Aleš Mrhar	P1-0189

<b>Biotechnical Faculty, University of Ljubljana</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Program no.</b>
34.	Biokemijska in biofizikalno-kemijska karakterizacija naravnih snovi ( <i>Slovene</i> )	Nataša Poklar Urlih	P4-0121
35.	Les in lignocelulozni kompoziti ( <i>Slovene</i> )	Miha Humar	P4-0015

<b>Agricultural Institute of Slovenia</b>			
<b>#</b>	<b>Project</b>	<b>P.I.</b>	<b>Project no.</b>
36.	Izdelava izotopskih analiz vzorcev vina s slovenskim geografskim poreklom letnika 2009 (strokovna naloga) ( <i>Slovene</i> )	Mitja Kocjančič, Franc Čuš	pogodba z MKGP

<b>Faculty of Natural Sciences and Engineering, Department of Textiles, University of Ljubljana</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Program no.</b>
37.	Textiles and ecology	Barbara Simončič	P2-0213

<b>Veterinary Faculty, University of Ljubljana</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Project no.</b>
38.	Endokrini, imunski in encimski odzivi pri zdravih in bolnih živalih ( <i>Slovene</i> )	Vojteh Cestnik	P4-0053

<b>Faculty of Mechanical Engineering, University of Maribor</b>			
<b>#</b>	<b>Program</b>	<b>P.I.</b>	<b>Project no.</b>
39.	EraNet MATERA Plus ANITMICROB PEPTIDES	Vanja Kokol	3211-10-000369
40.	BIOPACKAGING	Lidija Fras-Zemljič	E-4952

<b>International projects</b>			
<b>#</b>	<b>Project</b>	<b>P.I.</b>	<b>Project no.</b>
41.	Enhancing Access and Services To East European users towards an efficient and coordinated pan-European pool of NMR capacities to enable global collaborative research & boost technological advancements, akronim: EAST-NMR	Janez Plavec	228461
42.	Bio-NMR, »NMR for Structural Biology«	Janez Plavec	261863
43.	Self-assembled guanosine structures for molecular electronic devices	Janez Plavec	COST MP0802

44.	“Why are some molecules sweet?” – NMR investigations on structure-taste relationship as revealed by the interactions between sweetener and water molecules and sweetener-cyclodextrin complexes	Janez Plavec	BI-TR/10-12-003
45.	New applications of randomly sampled NMR data sets with improved resolution	Janez Plavec	BI-PL/10-11-007
46.	NMR študija delovanja antagonistov angiotenzina II	Janez Plavec	BI-HR/10-11-005
46.	Development of high-resolution methods for solid-state NMR spectroscopy of pharmaceutical materials	Gregor Mali	SLO-FR bilaterala
47.	PUREWATER – Eureka Project	Venčeslav Kaučič	3211-08-000208
48.	Innovative switchable shading applicances based on nano-materials and hybrid electrochromic device configurations (INNOSHADE, EU Project)	Boris Orel	FP7-NMP-2007-CP-200431
49.	Multifunctional paint coatings for "all-polymeric" solar thermal collectors (MULTIFUNCOAT)	Boris Orel	3211-09-000029
50.	Novel generation of polymethacrylate / zinc oxide nanocomposites for advanced applications, akronim Novapol (ERA-NET MNT)	Zorica Crnjak Orel	2008-04081
51.	Novel biotechnological approaches for utilizing carbon containing wastes to make high added value products (7. OP EU: ANIMPOL; USEFUL WASTE)	Andrej Kržan	245084
52.	Composites with Novel Functional and Structural Properties by Nanoscale Materials (COST)	Miroslav Huskić	MP 0701
53.	Uporaba energetskega manj potratnih sinteznih metod za pripravo LiMnPO <sub>4</sub> ( <i>Slovene</i> )	Robert Dominko	Project med KI in CEA
54.	MAREX (Exploring Marine Resources for Bioactive Compounds: From Discovery to Sustainable Production and Industrial Applications) EU FP7 Collaborative Project (large scale integrating project)	Danijel Kikelj	245137
55.	Food analysis using Isotopic Techniques – Proficiency Testing Scheme (FIT-PTS 2011)	Mitja Kocjančič Franc Čuš	V okviru strokovne naloge 1.1
56.	FP7-2009-REGPOT-1, ARCADE	Simona Golič Grdadolnik	245866

**Centre of Excellence, acronym EN-FIST (Excellent NMR → Future Innovation for Sustainable Technologies)**

#	Project	P.I.	Project no.
57.	Solid-state nuclear magnetic resonance and studies of polymorphism	Gregor Mali	RRP1
58.	Structure and analysis of organic compounds in solution with the use of NMR	Primož Šket	RRP2
59.	Characterization of recombinant proteins and biological macromolecules in aqueous solution	Igor Zhukov	RRP3
60.	Interactions of new ligands with protein targets, rational drug design	Simona Golič Grdadolnik	RRP4
61.	Asymmetric synthesis: Development of new chiral ligands for metal-promoted asymmetric transformations	Barbara Mohar	RRP6
62.	Qualitative and quantitative analysis of organic compounds with hyphenated techniques	Irena Vovk	RRP7
63.	Study of drug delivery systems based on polymeric carriers	Ema Žagar	RRP10

**Contracts with partners from industry**

#	Krka d.d., Novo mesto	P.I.	Št. pogodbe
64.	Pogodba št. II/25-106 259 – 106632/2007 (Slovene)	Janez Plavec	II/25-106 259 - 106632/2007
65.	Sodelovanje na področju kemijske sinteze (Slovene)	Barbara Mohar	II/19- 106632/2008 244/05-L08
66.	Alternativne sinteze farmacevtskih učinkovin, z IJS (Slovene)	Jernej Iskra	III./9- 106632/2007
67.	Izdelava sinteze vzorcev gametocidov, z IJS (Slovene)	Jernej Iskra	U1-SN-K3- 79/10
<b>Pliva d.d., Zagreb</b>			
68.	Pogodba o sodelovanju na področju NMR spektroskopije (Slovene)	Janez Plavec	
<b>ECOT d.o.o., Ljubljana</b>			
69.	Raziskave na področju površinsko aktivnih spojin, z IJS (Slovene)	Stojan Stavber	
<b>TKK Srpenica d.d., Srpenica</b>			
70.	Pogodba o sodelovanju (Slovene)	Janez Plavec	
<b>Melamin kemična tovarna d.d., Kočevje</b>			
71.	Pogodba o sodelovanju (Slovene)	Janez Plavec	

