

Number	requirement		postdoc work		Institution	
	Major	Number	Research field	Duty	Professeur	Tel/E-mail
1	Superconducting magnet design	1	fusion superconducting magnet design, optimization and test	superconducting coil design, calculation and optimization, quench simulation, ac loss calculation, low temperature test system establish and excitation test.	Jinxing ZHENG	0551-65592112/ jxzheng@ipp.ac.cn
2	pulsed power technology	2	pulsed power supply	Research on switching characteristics of high power full-controlled solid-state switch and mechanical analysis of pulse inductor	Yiyun HUANG Zhiquan SONG	0551- 65591404/yyhuang@ipp.ac.cn
3	Plasma theory and simulation	1	MHD instability at edge plasmas	studies of the peeling-ballooning modes for EAST edge plasmas, developing a code for boundary simulations.	Xiang Nong	0551-65595032 xiangn@ipp.ac.cn
4	Plasma theory and simulation	1	Plasma wall interactions	Particle in cell simulations of heat flux to tokamak divertors and interactions of plasma and guard limiter in front of lower hybrid wave antenna on EAST tokamak	Xiang Nong	0551-65595032 xiangn@ipp.ac.cn
5	Nuclear science and engineering	1	liquid metal compatibility	Study of the erosion and wetting of wall and structural materials by liquid metal	Jiansheng Hu	0551- 65591353/hujs@ipp.ac.cn
6	Physics、Optics、Electronics	1	Plasma spectroscopic diagnostics and plasam transport	Responsible for developing spectroscopic diagnostics; Responsible for developing key techniques of spectroscopic diagnostics for fusion reactor; Responsible for studying plasma momentum transport and particle transport	Bo Lyu	0551-65597105 / blu@ipp.ac.cn
7	Superconducting magnets technology	1	Quench detection	Responsible for developing quench simulation and experimental analysis for HTS cables/coils; Responsible for developing quench simulation for TF/PF coils; Responsible for developing novel quench detection schemes	Hu yanlan	0551- 6551372/yanlanghun@ipp.ac.cn
8	Refrigeration and Cryogenic Engineering	1	Research and design on helium turbines and cold compressors	Design and development of the precise cryogenic machinery, such as full gas bearing helium turbines, cold compressors and so on.	Qiyong Zhang	65593067/zhangqy@ipp.ac.cn

9	Refrigeration and Cryogenic Engineering	1	Research and design on large-scale helium refrigerators	Design and system integration of large-scale helium refrigerators.	Qiyong Zhang	65593067/zhangqy@ipp.ac.cn
10	Plasma physics/Plasma diagnostics	3	Burning plasma diagnostics	DT Burning plasma diagnostics research, Diagnostic physics simulation, design, key technology development and bench test	Haiqing LIU	13855124913/hqliu@ipp.ac.cn
11	Nuclear science and Engineering / nuclear science and technology	2	Fusion plasma energetic particles diagnosis and physical research	Fusion product (neutron, alpha particle and triton) diagnostic development, neutron and high-energy particle transport simulations, plasma auxiliary heating and fusion plasma energetic particle confinement and transport research.	Liqun Hu	0551-65591604/lqhu@ipp.ac.cn
12	Electronic Science and Technology/Nuclear Science and Technology	2	Research on radiation-resistant electronics system of fusion device	Research and development of diagnostic electronics system against electromagnetic radiation and nuclear radiation in fusion device, including research and experimental of front-end radiation-resistant electronics and main electronics system with FPGA.	Liqun Hu	0551-65591604/lqhu@ipp.ac.cn
13	Biological Physics	1	Synthetic Biology	The design, creation and optimization of microbial synthesis pathway of target metabolites; The optimization of cell performance; Building a highly efficient microbial cell factory.	Jianming Yao	055165591399/jmyao@ipp.ac.cn
14	Biological Physics	1	Microbial Fermentation	Fermentation process control and optimization; Influence mechanism and control countermeasures of nutrition, environment and control on fermentation; Pilot scale-up and industrialization scale-up of fermentation technology	Jianming Yao	055165591399/jmyao@ipp.ac.cn
15	Microwave and electromagnetic field	1	Microwave engineering / High power microwave devices / Antenna design	Familiar with microwave engineering theory, simulation analysis methods and tools, able to design, develop and debug microwave devices independently; especially familiar with high power microwave (HPM) theory and experience is preferred.	Gen Chen	15345605820/chengen@ipp.ac.cn
16	Plasma physics	1	Numerical simulation and application of low temperature plasma	Familiar with low-temperature plasma simulation and related theories, have program development experience and experience, and be able to study the characteristics of plasma generation.	Gen Chen	15345605820/chengen@ipp.ac.cn

17	Ion source physics and Engineering	1	Cathode discharge ion source / ICP ion source / ECR ion source	Engaged in ion source related design and simulation analysis, discharge characteristics research, able to complete ion source development, design and optimization independently.	Gen Chen	15345605820/chengen@ipp.ac.cn
18	Electrical and automation	1	Automatic control / Pulse power supply / Switching power supply	Mainly engaged in PLC, FPGA and other electrical automation control development, or engaged in high-power pulse power supply development, switching power supply development.	Gen Chen	15345605820/chengen@ipp.ac.cn
19	Environmental engineering/Plasma Chemistry	1	Environmental engineering	The synthesis and modification of materials using plasma technique, and the pollutant treatment using plasma technique	CHEN Changlun	0551-65592788/clchen@ipp.ac.cn
20	Plasma physics	1	Plasma Application	Interaction mechanism and environmental application of plasma and aqueous solution (sterilization, degradation of organics, gas reforming)	Yuedong Meng	0551-65591344/shenjie@ipp.ac.cn
21	Plasma physics	2	Low temperature plasma sources technology	Design of new plasma source and experimental research, numerical simulation	Guohua Ni	65591392/ghni@ipp.ac.cn
22	Medical physics	2	Plasma medicine	Research on plasma application in wound healing, tumor treatment, and so on	Guohua Ni	65591392/ghni@ipp.ac.cn
23	Plasma physics, or biology, or environmental science.	1	Plasma physics and its application in biomedicine or environment.	Development of plasma generator for biomedical or Environmental application, diagnosis of plasma characteristic parameters, measurement of plasma-induced reactive species in liquid, and the effects and mechanism of atmospheric pressure plasma on cells or microorganisms, degradation of organic pollutants in water by plasma.	Cheng Cheng	13205695549/0551-65592798/chengcheng@ipp.ac.cn
24	Nuclear energy science and Engineering	1	Research of ammonia engine	The interaction between plasma and fuel gas is studied, and the treatment of engine exhaust gas is studied.	Jiangang Li	0551-65591344
25	Materials/Plasma Physics/Nuclear Engineering	1	Co-irradiation effects on materials	Plasma and neutron/ion co-damage effects on materials	Guang-Nan Luo	65592525 gnluo@ipp.ac.cn
26	Plasma physics	1	molecular spectroscopy in plasma	Deuterium molecular processes in detached divertor plasma of Tokamak via plasma spectroscopy	Guang-Nan Luo	65592525 gnluo@ipp.ac.cn

27	Nuclear Engineering	1	radiation safety	radiation transport simulation code development to serve radiation safety communicate technical outcome in conferences and journals	Shanliang Zheng	65597087 slzheng@ipp.ac.cn
28	Nuclear Engineering	1	safety analysis	identify pathway of helium leakage from cryogenic system in fusion facility simulate the accident scenarios that result in helium leakage communicate technical outcome in conferences and journals	Shanliang Zheng	65597087 slzheng@ipp.ac.cn
29	Chemical Engineering	1	fusion technology	fusion fuel cycle technology fuel process and management communicate technical outcome in conferences and journals	Shanliang Zheng	65597087 slzheng@ipp.ac.cn
30	Mechanical Engineering	2	mechanical engineering	mechanical design for fusion facility including CAD modelling and drawing generation	Songlin Liu	65592172 slliu@ipp.ac.cn
31	Thermal power engineering	1	heat and mass transfer theory	The optimization of heat transfer under high heat flux; Structure design and performance optimization for the high heat flux parts.	Yuanlai Xie	65591309/ laurence@ipp.ac.cn
32	Plasma physics	1	Ion source physics	Design and performance optimization of beam extraction system; Study of feedback control characteristic of arc discharge based on multivariate methods.	Chundong HU	65593146/ cdhu@ipp.ac.cn
33	Physics	1	Neutral beam physics	Study of interaction between beam and plasma	Bin WU	65593283/ wubin@ipp.ac.cn
34	Nuclear Energy Science and Engineering/Plasma physics	2	Neutral beam engineering	Simulation study of beam transmission; performance optimization of ion beam bending system; structure analysis and optimization of beam source; neutralization of negative ion beam	Yuanlai Xie	65591309/ laurence@ipp.ac.cn
35	Control engineering	1	Measurement and control technology for NBI	Design of beam operation control and data services system	Yuanlai Xie	65591309/ laurence@ipp.ac.cn