

Dear students,

One of our partners, **The Novosibirsk State University** (Russia) is offering Master's degree students **50 research internship opportunities**.

Those internships have 3 months minimum of length, taught in English or Russian, at dates convenient to you.

Please, find attached to this letter the keywords that define the internship offers. There are 7 big research areas:

- Chemistry;
- Mathematics and computer Science;
- Physics;
- Biology;
- Economics;
- Earth Sciences;
- Human Sciences.

To apply, please find here bellow the documents you need to provide :

- Your resume;
- A cover letter that includes the theme of your internship and the dates, and the subjects you have studied before;
- 2 recommendation letters.

Please send all of the documents required to the following email :

coor-france@nsu.ru

For further information about The Novosibirsk State University I encourage you to visit its website <https://english.nsu.ru/>

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Here are the keywords that define the content of the internship offers

Chemistry

2D-materials;
advanced materials;
advanced powder technologies;
atmospheric chemistry ;
biofuels transformation;
carbon nanomaterials (CNM);
catalysis;
catalyst;
catalytic aftertreatment;
CNM-enhanced composites;
Co-crystals;
compounds materials;
computational catalysis
coordination chemistry ;
delafossite structure;
energy materials;
fluorescent spectroscopy;
graphene-based nanoelectronics;
heterogeneous catalysis;
high-pressure research;
hydrogen;
in situ study;
materials for optoelectronics;
microscopy;
minerals;
mixed ionic -electronic conductivity;
mixed oxides;
nanocomposites synthesis and characterization;
nanomaterials;
nanoscale oxides;
nanostructured graphene;
NMR;
organic electronics;
organic synthesis;
oxidative catalysis;
oxide;
oxygen and hydrogen separation membranes;
oxygen/hydrogen heteroexchange;
pharmaceutical materials;
polymorphs of organic compounds;
porous materials, MOFs
processing of hydrocarbons;
reactivity;
real structure;
salts;
single crystalline materials;
solid drug forms;
solid oxide fuel cells;
solid state chemistry;
spectroscopy;
surface properties;
surface science;
syngas;
thermo- and photomechanical effects in crystals;
transport properties;
X-ray diffraction;
XRD;

Mathematics and Computer Science

acute stroke segmentation;
AJAX;
algebra ;
Altera (Intel) FPGA;

application of machine learning algorithms in linguistics;
artificial intelligence;
associative dictionary;
automated reasoning;
automatic summarization;
boolean functions optimization;
business process modeling;
C++;
Cayley graph theory
combinatorial optimization ;
compilers;
computable model theory;
computational geometry
computational knowledge ;
computational linguistics;
computational mechanics;
cryptography;
CUDA;
data assimilation ;
data processing ;
declarative programming;
deep learning;
discrete optimization
distributed computing ;
distributional semantics for natural languages;
effective model theory;
elasticity ;
electronic microscopy ;
facility location;
formal semantics for natural languages;
Fortran;
fracturing problems;
GPU;
high performance computing;
HPC;
hydraulic fracturing;
image processing ;
inverse problems ;
IT Operations Research ;
knowledge representation;
machine learning;
mathematical logic;
mathematical modeling;
mathematical modelling of fluid flow,
mechanochemistry ;
numerical methods
numerical modeling;
numerical simulation;
OpenACC;
orthogonal transformations ;
parallel computing ;
parallel programming;
PHP;
plant raw materials ;
Postgres;
random number generators;
randomness;
Registration and processing data system;
Simulation of disperse/dense flows with relatively big particles;
Stackelberg game;
statistical tests;
supercomputers;
supply chain;
SystemVerilog;
textural features ;
thematic classification of texts in natural language;

theory of rhetorical structure;
tomography images;
tsunami waves;
vehicle routing;
visualization of results;
warehouse management;
web programming;

Physics

atomic spectroscopy ;
capillarity ;
combustion
computer simulations;
condensation ;
contact-line phenomena;
convective condensation;
crack propagation;
differential and integro-differential equations;
drop evaporation;
drop spreading;
elasticity tensors;
electronic and microelectronic equipment;
enhancement of heat transfer at vapor condensation by finning;
evaporative cooling systems
finite element method (FEM);
fluid mechanics;
fluoropolymer film;
gas dynamics;
heat transfer
heat transfer intensification;
Hencky model;
high energy physics
hydrodynamics;
hypo- and hyperelastic relations;
initial stress;
kinetic stability;
large strains;
mathematical theory for gas-dynamic;
metal nanoparticles;
metal thin films;
microchannels ;
minichannels;
nuclear magnetic resonance ;
optical properties;
plasma theory;
protect coatings;
quantum information ;
rivulet dynamics
spin hyperpolarization ;
spin relaxation ;
superhydrophobic;
tensile cracking;
thin falling liquid films;
thin films;
two-phase flows ;
vapor/gas shear-driven liquid film flows;
wetting ;

Biology

birds;
carcinogenesis;
chromosome;
CRISPR/Cas9;
DNA damages;
DNA repair;
extracellular matrix;

glioblastoma;
glycosylation;
hybrids;
mammals;
meiosis;
molecular biology;
mutagenesis;
nucleosome;
oxidative damage;
PARP;
PostgreSQL;
protein engineering;
proteoglycan;
python3;
quantitative genetics;
recombination;
Serotonergic system
statistics;
tumour microenvironment;

Economics

income convergence;
income distribution;
kinetic stability;
market interaction;
regional inequality;
spatial price dynamics;

Earth sciences

bioevents;
biostratigraphy;
chemostratigraphy;
chorology;
early Cretaceous;
experiments under high-pressure and high-temperature;
Jurassic;
mathematical models in geophysics
molluscs;
phase diagrams;
taxonomy;

Human Sciences

EEG;
inclination to depression;
inter-cultural differences;
neurolinguistic;