EMSL Proposal - Necessary Information

To use the EMSL facility, prospective users are asked to submit a proposal form. Following submission of a proposal, proposal authors will receive a prompt confirmation of receipt of the electronic proposal. After a thorough peer review, the authors will be advised whether the proposed use has been approved.

Submit a User Proposal

An EMSL user proposal requires a lot of detailed information. To aid the process, we suggest you collect the necessary information before you begin filling out the proposal form, which is outlined below. This PDF/paper version of the EMSL online user proposal is provided as a convenient way for potential authors to prepare ahead of time the information needed for their proposal. You will still be required to enter the actual information using the online system.

*Proposal Primary Author**

The lead professor(s) or advisor(s) of students or of post-docs should be listed as the primary author.

Is this participant the primary author of this proposal? ☐ Yes ☐ No

Will this participant be visiting EMSL? ☐ Yes ☐ No

Prefix: ☐ Dr. ☐ Mr. ☐ Mrs. ☐ Ms.

First Name	**Middle** Name (No initials; if no middle name, use "NMN")	**Last** Name	Suffix

Primary Citizenship	**Dual Citizenship**

Profession:
☐ High School Student ☐ Undergraduate Student ☐ Graduate Student ☐ Postdoc
☐ Faculty/Staff ☐ Research Scientist/Engineer ☐ Professional ☐ Self-Employed
☐ Retired ☐ Other (please specify): _____

Phone Number (including area code)	**Fax** Number (including area code)	**E-mail** Address

Institution Information

Type of Institution:
☐ Academia ☐ Battelle Columbus ☐ DOE Lab (other than PNNL)
☐ Foreign National Laboratory ☐ Other Government Agency ☐ PNNL ☐ EMSL (if line staff)
☐ Private Industry ☐ Other (please specify): _____

Institution Name	**Department**

Business Address

City	**State/Province**	**Postal Code** (only if U.S. or Canada)	**Country**

**In addition to the Proposal Primary Author, the above information will be required for each proposal participant. You may find it helpful to make additional copies of this page and complete one for each author you plan to list on the proposal.*

Proposal Details

Proposal Title: _____

Abstract: (500 word limit, you will need to cut and paste this on the online form)

_____

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Proposed Research file: (you will need to attached a file (.pdf or .doc) describing the proposed research, limited to three pages)

_____

Additional Files: (e.g. CVs, images, etc). Authors can add any supplemental information they think is necessary but there is no guarantee that the reviewers will read it.

_____

Preferred Start Date:_____ **Preferred End Date:** _____

Primary Research Area:

- ☐ Biological and Live Sciences (Excludes medical applications)
- ☐ Earth Sciences
- ☐ Environmental Sciences
- ☐ Medical Applications
- ☐ Optics
- ☐ Physics (excludes Condensed Matter Physics)
- ☐ Chemistry (excludes Materials Chemistry)
- ☐ Engineering
- ☐ Materials Sciences (includes Condensed Matter Physics & Materials Chemistry)
- ☐ Polymers
- ☐ Other

What Type of Access are you requesting?

☐ Standard ☐ Rapid*

* Proposal must clearly justify why Rapid Access is needed
* Limited to Open Call, General type, and Non-proprietary status in the following 3 categories

What Call For Proposals are you responding to?

- ☐ Open
- ☐ Capabilities-based
- ☐ Computationally Intenstive Research
- ☐ Science Theme Call: Biological Interactions and Dynamics
- ☐ Science Theme Call: Atmospheric Aerosol Chemistry
- ☐ Science Theme Call: Science of Interfacial Phenomena
- ☐ Science Theme Call: Geochemistry/Biogeochemistry and Subsurface Science

What Type of Proposal are you submitting? ☐ General ☐ Partner (requires a letter of interest initially)

What is the Proprietary Status of your proposal? ☐ Non-proprietary ☐ Proprietary

Is this proposal associated with a National Science Foundation Supplemental Funding Request? ☐ Yes ☐ No

Will you desire the assistance of EMSL staff in obtaining and interpreting the results? ☐ Yes ☐ No

In your proposal, be sure to be specify how many labor hours you are requesting (e.g. Need 8 hrs of consultant time to be trained on the 900 MHZ NMR, have been trained to use the accelerator but need help in analyzing data).

EMSL Resources

If you know which EMSL resources you would like to use during your proposal, please indicate them in the list below by entering an estimate for the number of hours you plan to use the resource for the first year of your proposal.

Computing

Capability Development

_____ Computing: Altix1 cluster

_____ Computing: Grapes Server

Data File Storage

_____ Computing: Data File Storage (NWfs)

Graphics

_____ Computing: 16-Processor Linux Cluster (piceis)

_____ Computing: SGI 16-processor Graphics Server (NWVisus)

_____ Graphics & Visualization Lab

Small Clusters

_____ Computing: NW-ICE

_____ Computing: Spokane cluster

Supercomputing

_____ Computing: MPP2 (HP 1960-Processor Linux Cluster)

_____ Computing: Chinook (HP 2310-Node Linux Cluster)

Deposition/Microfabrication

Ion/Molecular Beam Spectrometry

_____ Ion Accelerator, Beam Lines, and End Stations

_____ Surface Dynamics/Ion Deposition System

Microfabrication

_____ Electron Microscope: Dual-Beam FIB/SEM

_____ Microfabrication Laboratory (Clean Room) 1302

Thin Film Deposition

_____ Deposition: Chemical Vapor, Oxide Metalorganic

_____ Deposition: Molecular Beam Epitaxy #1

_____ Deposition: Molecular Beam Epitaxy #2

_____ Deposition: Pulsed Laser Deposition System

Kinetics and Reactions

Surface Processes

_____ Atmospheric Pressure Reactor System

_____ Catalysis: UHV Model Catalysts, High Pressure

_____ Electron and Photon Stimulated Desorption (BES 2)

_____ Energetic Processes (Surfaces/Solids) Instrumentation

_____ Liquid-Beam Source

_____ Molecular Beam Kinetics (BSK)

_____ Molecular Beam Kinetics (ICS1-1)

_____ Molecular Beam Kinetics (ICS1-2)

_____ Surface Dynamics/Ion Deposition System

_____ Transient Kinetic Analysis (TKA)

_____ Spectrometer: Second Harmonic Generation

_____ Spectrometer: Fluorescence, time-resolved

Gas Phase Clusters

_____ Mass-Selected Ion Deposition System - ElectrospraySource

_____ Photoelectron Spectroscopy - Electrospray Source

_____ Photoelectron Spectroscopy - Low Temperature

_____ Photoelectron Spectroscopy of Atomic Clusters – Laser Vaporization Source

Solution Phase

_____ Spectrometer: Fluorescence, time-resolved

_____ Spectrometer: Stopped-Flow, Absorbance, BioLOGICSFM-400

Mass Spectrometry

Aerosol Particle Characterization

_____ Mass Spectrometer: Laser Desorption - Ion Trap

_____ Mass Spectrometer: Aerosol - time-of-flight - high resolution

_____ MMass Spectrometer: Aerosol - time-of-flight - standard

_____ Mass Spectrometer: Linear Ion Trap Quadrupole (LTQ) Orbitrap MS for environmental research

_____ Mass Spectrometer: Single Particle Mass Spectrometer (SPLAT II)

_____ Mass-Selected Ion Deposition System - ElectrospraySource

_____ Proton Transfer Reaction Mass Spec (PTRMS)

Biological

_____ Mass Spectrometer: Fourier transform

_____ Mass Spectrometer: Ion Trp

_____ Mass Spectrometer: Quadropole ToF

Other

_____ Analytical: Inductively Coupled Plasma-Mass Spec(ICP-MS)

_____ Mass Spectrometer: Isotope Ratio

_____ Mass Spectrometer: Secondary Ion (SIMS), TOF

_____ Mass Spectrometer: Time of Flight Secondary Ion (ToF SIMS) – 2007

Sample Preparation

_____ Free Flow Electrophoresis

Microscopy

Aerosol Particle Characterization

_____ Electron Microscope: Scanning, Environmental, Field Emission (FEI)

_____ Mass Spectrometer: Single Particle Mass Spectrometer (SPLAT II)

Optical

_____ NMR Spectrometer: 500 MHz WB Bruker Advance Imaging

_____ Microscope: Fluorescence - Single-Molecule

_____ Microscope: Fluorescence - Single-Molecule / Patch Clamp

_____ Microscope: Raman Confocal

_____ Spectrometer: FTIR - standard

_____ Spectrometer: FTIR - high resolution

_____ Spectroscopy: Fluorescence, time-resolved

_____ Spectrometer: Laser Induced Breakdown (LIBS)

_____ Spectrometer: Fluorescence, cryogenic

_____ Spectroscopy: Fluorescence, time-resolved

_____ Tissue-Culture Facility Electron

Electron

_____ Electron Microscope: Photoemission (PEEM)

_____ Electron Microscope: Scanning, Field Emission (LEO)

_____ Electron Microscope: Transmission, High Resolution

_____ Electron Microscope: Dual-Beam FIB/SEM

_____ Electron Microscope: Transmission, Cryo

Scanning Probes

_____ Microscope: Scanning Probe: AFM Compound

_____ Microscope: Scanning Probe - AFM, Bioscope

_____ Microscope: Scanning Probe - DI Nanoscope IIIa Multimode

_____ Microsope: Scanning Probe - Dynamic Force

_____ Microscope: Scanning Probe - STM/AFM, PicoSPM

_____ Microscope: Scanning Probe - Variable Temperature

_____ Microscope: Scanning Probe - Variable Temperature UHV

Subsurface Flow and Transport

Analytical

_____ Analytical: Chromatograph: Ion #1

_____ Analytical: Chromatograph: Gas/Mass Spec System 20

_____ Analytical: Chromatograph: Liquid #1

_____ Analytical: Inductively Coupled Plasma-Mass Spec (ICP-MS)

_____ Analytical: Total Organic Carbon Analyzer (TOC)

Flow Cells

_____ SFTEL: Flow Cells

Other

_____ SFTEL: Microfluidics for Flow & Transport

_____ SFTEL: Hydraulic Property Apparati

NMR and EPR

EPR

_____ EPR Spectrometer Pulsed, ENDOR/ELDOR

High-Resolution Liquids

_____ NMR Spectrometer: 500 MHz NB CMX for Liquids (and solids)

_____ NMR Spectrometer: 600 MHz NB Varian Inova

_____ NMR Spectrometer: 600 MHz NB Varian Inova -Cryoprobe

_____ NMR Spectrometer: 600 MHz NB Varian LC-NMR System - metabolomics cryoprobe

_____ NMR Spectrometer: 750 MHz NB (17.6 Tesla) VarianInova

_____ NMR Spectrometer: 800 MHz (18.8 Tesla) Varian Inova

_____ NMR Spectrometer: 900 MHz (21.1 Tesla)

Imaging

_____ NMR Spectrometer: 2 Tesla Horizontal Bore Varian UniPlus (Imaging)

_____ NMR Spectrometer: 500 MHz WB Bruker AdvanceImaging

Radiological

_____ NMR Spectrometer: 300 MHz WB Tecmag Discovery(radioactive samples)

_____ NMR Spectrometer: 500 MHz NB CMX for Liquids (and solids)

Solid-State

_____ NMR Spectrometer: 300 MHz WB CMX for Solids (and liquids)

_____ NMR Spectrometer: 300 MHz WB Tecmag Discovery (radioactive samples)

_____ NMR Spectrometer: 500 MHz NB CMX for Liquids (and solids)

_____ NMR Spectrometer: 500 MHz WB Varian NMR System(solids)

_____ NMR Spectrometer: 750 MHz NB (17.6 Tesla) VarianInova

_____ NMR Spectrometer: 800 MHz (18.8 Tesla) Varian Inova

_____ NMR Spectrometer: 900 MHz (21.1 Tesla) Radiological

Spectroscopy/Diffraction

Electron

_____ Electron Spectrometer: Auger/Scanning Auger

_____ Electron Spectrometer: HREELS, UHV SurfaceChemistry

_____ Electron Spectrometer: XPS/AES (Kratos multitechniq

_____ Electron Spectrometer: Scanning Multiprobe Surface Analysis System - Versaprobe

_____ Electron Spectrometer: XPS High Resolution (Quantum

_____ Photoelectron Spectroscopy - Electrospray Source

_____ Photoelectron Spectroscopy - Low Temperature

_____ Photoelectron Spectroscopy of Atomic Clusters - LaserVaporization Source

Infrared

_____ Spectrometer: FTIR - standard

_____ Spectrometer: FTIR - high resolution

Ion/molecular beam spectrometry

_____ Ion Accelerator, Beam Lines, and End Stations

_____ Surface Dynamics/Ion Deposition System

Mossbauer

_____ Spectrometer: Mossbauer

Optical Spectrometers

_____ Microscope: Raman Confocal

_____ Spectrometer: Fluorimeter

_____ Spectrometer: Circular Dichroism

_____ Spectrometer: Stopped-Flow, Absorbance, BioLOGICSFM-400

_____ Spectroscopy: Fluorescence, time-resolved

_____ Spectrometer: Laser Induced Breakdown (LIBS)

_____ Spectrometer: Fluorescence, cryogenic

_____ Spectrometer: Fluorescence, picosecond

_____ Spectrometer: Second Harmonic Generation

X-ray diffractometers

_____ X-ray Diffaction: Special Applications

_____ X-ray Diffraction: Four-Circle

_____ X-ray Diffraction: General Purpose

_____ X-ray Diffraction: Microbeam

_____ X-ray Diffraction: Single Crystal

Proposal Funding

Funding Agencies:

Select the funding agencies associated with your proposed research.

- ☐ Department of Defense
- ☐ DOE, Office of Advanced Scientific Computing Research
- ☐ DOE, Office of Biological & Environmental Research
- ☐ DOE, Office of Environmental Management
- ☐ DOE, Office of Nonproliferation & National Security
- ☐ DOE, Other: _____
- ☐ Environmental Protection Agency
- ☐ Foreign Government Agency
- ☐ Industry, Foreign
- ☐ Industry, U.S.
- ☐ LDRD, Other National Lab
- ☐ LDRD, PNNL
- ☐ National Aeronautics and Space Administration
- ☐ National Institutes of Health
- ☐ National Science Foundation
- ☐ Nuclear Regulatory Commission
- ☐ Other U.S. Government Agency: _____
- ☐ University, Foreign
- ☐ University, U.S.
- ☐ Other (please specify): _____

Work Package # (required for PNNL employees so the EMSL Business Office can verify if the work is government or private**)**

_____

Materials & Equipment

Will your research involve the use of human blood, tissues, DNA, cells, cell lines, or human biological samples in any form?	☐ Yes	☐ No
Does your work involved the use of live animals?	☐ Yes	☐ No
Will you be bringing or sending any chemicals to the EMSL facility?	☐ Yes	☐ No
Will you be bringing or sending any samples to the EMSL facility?	☐ Yes	☐ No

If you intend to bring or send any chemicals, samples, or equipment to EMSL for this proposed research, please list it here. If you are bringing computers that will need to connect to the PNNL network, please list them as well.

_____

_____

_____

Comments/Additional Needs

If you have any additional needs or comments regarding the proposal or the process, please enter them here:

_____

_____

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