

DGK conference 2022



Monday 14 March 2022 - Thursday 17 March 2022

Topical tracks

Main conference

Covid-19

Biologic Structure, Function, Reactivity, and Regulation

macromolecular structures
methods and facilities
integrative structural biology
enzymes
drug design
regulation
complexes
membrane proteins
hot structures
molecular machines
fold prediction

Structural Chemistry & New crystal structures

green chemistry
inorganic crystal structures
coordination compounds
small molecules
organic crystal structures
supramolecular chemistry
absolute structure
polymers
porous materials (MOFS, Carbons, Zeolites, Polymers.....)
aperiodic structures
disorder
amorphous materials
nanoparticles

Solid State Physics and Crystal Physics

magnetism and magnetic structure
ferroics, multiferroics
symmetry breaking
phase transitions
structure and dynamics
thermodynamics
crystal optics

Engineering Materials and Applications

binders, cement
battery materials
in-situ and in-operando studies
semiconductors
alloys
photovoltaics

thermoelectrics
hydrogen storage
hydrogen embrittlement
ionic conductors
porous materials (MOFs, COFs, Carbons, Zeolites, Polymers.....)
catalysis
nanostructuring
nanoparticles

Natural Materials and Environments (Minerals, Biogenic Materials...)

geomaterials
biogenic materials
extreme conditions
environmental processes
mineral surface processes
thermodynamics
reactivity

Structure property relationships

In-situ and in-operando studies
extreme conditions
functional materials
phase transitions

Theory, simulation, modeling, computational crystallography

group theory
structural systematics
electron density
Hirschfeld atom refinement
structure prediction
molecular dynamics
Monte Carlo
DFT
thermodynamics

Crystallography in Education, Art, and Society

science communication
teaching
cultural heritage
science policies
symmetry and broken symmetry in art

Advances in Methods, Instrumentation and Data Analysis

sources
beamlines
optical devices
sample environments
data processing
algorithms and software

artificial intelligence
electron crystallography
electron microscopy
XFEL
neutrons
synchrotron
spectroscopy
high throughput platforms
total scattering
3D delta-pdf

Crystallization, Crystal Growth Processes, Synthesis

environmentally friendly processes
Crystallography in green chemistry.
nucleation
morphology
microstructure
defects
growth mechanisms
kinetics
thin films
surfaces and interfaces

Surfaces, Interfaces, Thin Films, Nanoparticles

surface and interface structure
reactivity
catalysis
nanostructuring

Other

Young crystallographers Lightning Talks