Justin Andrews
Solid State Chemist

As a solid state chemist, Dr. Justin Andrews designs new **inorganic materials** with specific purposes, such as better energy storage for batteries, or more optimal materials for computers and phones.

Solid state **chemistry** is equal parts chemistry, physics, mechanical engineering, and chemical engineering! When new materials are created, those materials must be **analyze**d with a variety of **techniques** to gain understanding of the material's properties.

Solid state chemists don't work with liquids or gases, but with the materials that we interact with on a daily basis: solids! Solid state chemistry focuses on materials like **rocks**, **minerals** like table salt, the food we eat, the ground we walk on and the buildings where we live and work.

To work with solids, chemists need to be able to **react** materials at extremely high temperatures. This is because a lot of **energy** is needed to get solids to interact with each other. A solid state chemist might use an arc melter to be able to heat solids up thousands of degrees in only a fraction of a second.

Y	S	L	A	I	R	E	T	A	M
R	L	S	D	I	L	O	S	T	I
T	A	K	B	T	S	D	E	N	Y
S	R	C	S	R	O	C	O	U	A
I	E	O	X	J	H	R	C	T	N
M	N	R	D	N	G	J	C	Q	A
E	I	A	I	A	P	A	S	M	L
H	M	Q	N	A	E	M	S	B	Y
C	U	I	R	R	V	C	M	N	Z
E	C	E	N	E	R	G	Y	G	E

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