

The following are links to university superalloy programs.

Click on Submit a Resource on Materials Technology@TMS to add more weblinks



PROFESSOR or GROUP	UNIVERSITY	WEBLINK	RESEARCH INTERESTS
Tresa Pollock	<i>University of Michigan, Department of Materials Science and Engineering</i>	[Launch Site]	Leads several research programs in the superalloy field, including a DARPA-sponsored program on microstructural effects on fatigue, an AFOSR-sponsored program on solidification defects, and AFOSR-sponsored and Pratt and Whitney/DARPA-sponsored modeling programs on microstructure and creep, respectively.
Sammy Tin	<i>Illinois Institute of Technology, Department of Mechanical, Materials & Aerospace Engineering</i>	[Launch Site]	Solidification, thermo-mechanical processing, mechanical behavior, corrosion and microstructural characterization of Ni-base superalloys and other high performance structural materials systems.
Maurice Gell	<i>University of Connecticut, Department of Chemical, Materials and Biomolecular Engineering</i>	[Launch Site]	Single crystal superalloy turbine blade materials and coatings.
Gerhard Fuchs	<i>University of Florida, Department of Materials Science and Engineering</i>	[Launch Site]	Conducts research in microstructure-processing-property relationships in high temperature materials.
Walter W. Milligan	<i>Michigan Tech, Department of Materials Science and Engineering</i>	[Launch Site]	Mechanical behavior and mechanics of materials, fatigue, nanostructured materials, metallic glasses, high temperature materials.
Mark L. Weaver	<i>University of Alabama, Department of Metallurgical and Materials Engineering</i>	[Launch Site]	Microstructural characterization, texture, mechanical properties, and tribology of bulk and thin film materials.
Harry Bhadeshia	<i>University of Cambridge, Department of Materials Science and Metallurgy</i>	[Launch Site]	Phase transformations, mathematical modelling.
Charles Feng	<i>Univ of Science & Technology, Beijing</i>	[Launch Site]	Research interests include(1) alloy design and development of high temperature structural materials, (2) advanced femtosecond laser machining of aerospace materials, (3) relationships of composition, processing, microstructure, properties and performance of metallic materials, (4) microstructure optimization, plastic deformation and dislocations mechanisms, and (5) application of conventional and advanced transmission electron microscopy in materials science.



The following are links to university superalloy programs.

Click on Submit a Resource on Materials Technology@TMS to add more weblinks

PROFESSOR or GROUP	UNIVERSITY	WEBLINK	RESEARCH INTERESTS
Roger Reed	<i>Univeristy of Birmingham</i>	[Launch Site]	Research interests include amongst other topics, the physical metallurgy of the superalloys, and their processing, properties and behavior under conditions pertinent to their application in gas turbine engines.
GPM (Groupe de Physique des Matériaux or Physics of Materials Group)	<i>University of Rouen</i>	[Launch Site]	GPM includes six research teams, two of which are ERMI and ERMO. ERMI is concerned with microstructures and properties of materials and ERMO is concerned with model systems. Both include research on phase transformations in superalloys.
CIRIMAT (Centre inter universitaire de recherche et d'ingénierie des matériaux)	<i>University of Toulouse</i>	[Launch Site]	Concrete applications are found in the transportation field: terrestrial, aeronautic and spatial. The activities relate among others to the study of the behavior of massive pieces (metallic or polymer-matrix composites), the protection of materials (anti-corrosion), the lightening of structural materials, and the elaboration of superalloys and coatings adapted to specific conditions encountered in use. The analysis and modeling of the microstructure of alloys and superalloys under thermal (solidification, thermal treatment), chemical (oxidation), and mechanical solicitations make it possible to investigate the damaging and durability of the materials.
LSG2M (Laboratoire de Science et Génie des Matériaux et de Métallurgie)	<i>School of Mines of Nancy (Ecole des Mines a</i>	[Launch Site]	Reference: Superalloys in China by Charles Feng, University of Science and Technology Beijing
LMPM/ENSMA (Laboratoire de Mécanique et de Physique des matériaux)	<i>Ecole Nationale Supérieure de Mécanique et</i>	[Launch Site]	Research areas include fatigue, environmental effects, microstructure, durability, modeling, viscoelasticity.
Centre des Matériaux	<i>School of Mines of Paris (Ecole des Mines de Paris)</i>	[Launch Site]	
	<i>Northeastern University, China</i>	[Launch Site]	Reference: Superalloys in China by Charles Feng, University of Science and Technology Beijing
	<i>Northwestern Polytechnical University, China</i>	[Launch Site]	Reference: Superalloys in China by Charles Feng, University of Science and Technology Beijing