

Saïd A. - Né le 08/02/1969
1004 Lausanne
3 ans d'expérience dont 1 à l'étranger
Réf : 801031137

Ingénieur en génie mécanique

Objectifs

- To secure a challenging and rewarding position within a solid, progressive company in a setting that best utilizes acquired education and background.

Ma recherche

Je recherche tout type de contrat, dans toute la France, dans l'Ingénierie.

Formations

Master en génie mécanique

Expériences professionnelles

2007

Research Assistant at the Composite Construction Laboratory (CCLab), Ecole Polytechnique Fédérale de Lausanne. January 2007 up to now. Tasks: Physical and Mechanical characterization of structural and semi-structural adhesives for bridges. Study of the physical properties, such as conversion, glass transition temperature, and kinetics of cure. Study of the short-term (tension, compression shear, impact) and long-term (creep, fatigue) behavior of these adhesives under elevated and low temperatures, humidity, and alkalinity, and other environmental actions. Specification of reduction factors and safety factors according to classes of environmental exposure. Choice of adhesive types, design models and recommendations for applications.

2004

Research associate at the CRASP (Centre de Recherche Appliquée sur les Polymères), École Polytechnique de Montréal, 2004-2006. Realizations and tasks: Collaborated with the CRASP team in the characterization and certification process of the new low-cost Seawind aircraft composite material according to Transport Canada and FAA recommendations. Carried out experimental and numerical studies of the mechanical behavior of bonded composite joints for the Seawind FDC aircraft. All the tests were performed on a MTS servo-hydraulic machine model MTS 810. For the Finite Element Analysis ANSYS software was used. Carried out a deep investigation of the reproducibility of the LPRI (Low Profile Resin Infusion) manufacturing process of the above cited composite material and the variability of its mechanical properties. A statistical analysis as recommended by the FAA was made in order to confirm its applicability in the aeronautical industry. The mechanical tests were performed at room temperature, cold temperature and elevated temperature. The influence of humidity at high temperature was also investigated.

Langues

- Arabe, Français, Anglais parlé: scolaire / écrit: notions

Atouts et compétences

Design, application, and characterization of adhesives, plastics, reinforced plastics and composite materials, design and stress Analysis of metallic and composite structural components, finite element analysis with MSC PATRAN,

NASTRAN, and ANSYS, fatigue and damage tolerance in composite and metallic structures. (Expert)

Centres d'intérêts

- Football, lecture