



# Current ENGINEERING Sciences Research

Editor  
Prof. Dr. Duygu Kavak

Engineering



LIVRE DE LYON

Lyon 2021


# **Current Engineering Sciences Research**

Editor  
Prof. Dr. Duygu Kavak



LIVRE DE LYON

Lyon 2021

**Editor** • Prof. Dr. Duygu Kavak  ORCID 0000-0002-1189-3110

**Cover Design** • Aruull Raja

**First Published** • January 2021, Lyon

**ISBN:** 978-2-38236-091-0

**© copyright**

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the publisher's permission.

The chapters in this book have been checked for plagiarism by  intihal.net

**Publisher** • Livre de Lyon

**Address** • 37 rue marietton, 69009, Lyon France

**website** • <http://www.livredelyon.com>

**e-mail** • livredelyon@gmail.com



## **PREFACE**

This book is titled as “Current Engineering Sciences Research” and it presents some significant current academic research studies in the field of engineering. The book consists of numerous reports of studies performed in various areas of science and engineering in order to get a multidisciplinary collection representing different points of view of the contributors and their approach to the solution of problems. Written by academics and researchers, this book will be an important resource for anyone in this field. I thank all the authors contributed to the book, the referees evaluated the studies and Livre de Lyon Publishing very much for their invaluable efforts. The editor and the editorial board hope that this book will be useful for all readers, especially for the researchers, engineers and academics.

Prof. Dr. Duygu KAVAK  
Editor



## CONTENTS

<b>PREFACE.....</b>	<b>I</b>
<b>Chapter I     A. S. Yargic</b>	
CONVERSION OF BIOPITCH TO CARBON FOAM WITH TUNABLE PROPERTIES: THE ROLE OF CHEMICAL ACTIVATION.....	<b>1</b>
<b>Chapter II    A. Eğrisöğüt Tiryaki</b>	
ADAPTIVE NEURO-FUZZY BASED APPROACH FOR INVERSE KINEMATICS        SOLUTION        OF        ROBOT MANIPULATOR.....	<b>23</b>
<b>Chapter III   A. Alkhattab &amp; D.Kavak</b>	
INVESTIGATION OF COLOR REMOVAL FROM DAIRY INDUSTRY WASTE WATER USING NF270 MEMBRANE.....	<b>39</b>
<b>Chapter IV    E. Duman &amp; M. Haslak</b>	
EFFECTS of INDUSTRIAL REFINING STAGES ON CORN OIL'S QUALITY AND BIOACTIVE COMPONENTS DETERMINED USING GAS CHROMATOGRAPHY AND INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY.....	<b>47</b>
<b>Chapter V     H. O. Durmus &amp; E. Cetin Ari &amp; B. Karaboce &amp;                 M. H. Y. Seyidov</b>	
TEMPERATURE CHARACTERIZATION OF LIGHT SOURCES SUCH AS LOW-POWER LASER, INTENSE PULSED LIGHT (IPL) AND LIGHT EMITTING DIODE (LED) USED FOR THERAPEUTIC PURPOSES ON TISSUE- MIMICKING MATERIALS.....	<b>61</b>
<b>Chapter VI    H. O. Durmus &amp; E. Cetin Ari &amp; B. Karaboce &amp;                 M. H. Y. Seyidov</b>	
SAFETY ASSESSMENT OF A 635 NM LOW-POWER SOLID- STATE MEDICAL LASER ON ZERDINE PHANTOM...	<b>81</b>
<b>Chapter VII   B. Yayli &amp; I.Kilic</b>	
MITIGATION OF AMMONIA FROM LITTER BY ADDITIVES IN POULTRY HOUSES.....	<b>103</b>

