

## **Prof. İSMAİL KARACAN**

### **Personal Information**

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### **International Researcher IDs**

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### **Education Information**

Post Doctorate, University of Leeds, Faculty Of Engineering, Department Of Textile Industries, United Kingdom 1993 - 1994

Post Doctorate, University of Leeds, Faculty Of Science, Inter Disciplinary-Research Center İn Polymer Science And Technology, United Kingdom 1990 - 1993

Post Doctorate, University of Leeds, Faculty Of Engineering, Department Of Textile Industries, United Kingdom 1986 - 1990

Doctorate, University of Leeds, Faculty Of Engineering, Department Of Textile Industries, United Kingdom 1982 - 1986

Undergraduate, University of Leeds, Faculty Of Engineering, Department Of Textile Industries, United Kingdom 1979 - 1982

Associate Degree, Anglia Ruskin University, The College Of West Anglia, Isle Campus, Cambridge, Science Department, Advanced Physics, Advanced Chemistry, Advanced Mathematics, Scientific English, United Kingdom 1978 - 1979

Associate Degree, Newnham Language Center, Grange Road, Cambridge, Department Of English, Advanced English Studies, United Kingdom 1977 - 1978

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, X-ray Diffraction Studies of Aromatic Fibres and Polymers, Leeds College Of Art And Design, Leeds, Faculty Of Engineering, Department Of Textile Industries, 1986

### **Research Areas**

Technical Sciences, Chemical Engineering and Technology, Chemical Technologies, Polymer Technology, Textile Engineering and Technology, Textile Materials, Textile Physics, Metallurgical and Materials Engineering, Material science and engineering, Testing and Control of Materials, Material Characterization, Basic Sciences, Chemistry, Analytical Chemistry, Spectroscopical Methods, Thermal Methods, Physical Chemistry, Polymeric Materials, Liquid Crystals and LCP

## **Academic Titles / Tasks**

Professor, Erciyes University, Mühendislik Fakültesi, Tekstil Mühendisliği, 2012 - Continues  
Associate Professor, Erciyes University, Mühendislik Fakültesi, Tekstil Mühendisliği, 2006 - 2012  
Assistant Professor, Erciyes University, Mühendislik Fakültesi, Tekstil Mühendisliği, 2004 - 2006  
Assistant Professor, Manchester Institute of Science and Technology, Mühendislik Fakültesi, Tekstil Mühendisliği, 1994 - 1998

## **Academic and Administrative Experience**

Erciyes Üniversitesi, Mühendislik Fakültesi, Tekstil Mühendisliği, 2004 - Continues  
Erciyes University, 2004 - Continues  
Erciyes University, 2004 - Continues  
Erciyes Üniversitesi, Mühendislik Fakültesi, Tekstil Mühendisliği, 2006 - 2009  
Erciyes Üniversitesi, Mühendislik Fakültesi, Tekstil Mühendisliği, 2006 - 2009  
Erciyes Üniversitesi, Mühendislik Fakültesi, Tekstil Mühendisliği, 2004 - 2009

## **Courses**

LİF BİLGİSİ , Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007  
YUKSEK PERFORMANSLI LİF ÜRETİM TEKNOLOJİLERİ, Postgraduate, 2014 - 2015  
POLIMER KİMYASINA GIRİŞ, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007  
AKILLI LİF TEKNOLOJİLERİ, Doctorate, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2009 - 2010, 2008 - 2009  
TEKSTURE İPLİK TEKNOLOJİSİ, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007  
YAPAY LİF ÜRETİM TEKNİKLERİ, Postgraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
İLERİ TEKSTİL VE POLIMER BİLİMLERİNDE ÖZEL KONULAR, Doctorate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
YUKSEK MODULLU LİF TEKNOLOJİLERİ, Postgraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
DOKUSUZ YÜZEY TEKNOLOJİLERİ, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009  
TEKSTİL ENDÜSTRISİNDE NANOBİLİM VE NANOTEKNOLOJİ, Undergraduate, 2013 - 2014  
BITİRME ODEVİ, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010  
YUKSEK MODULLU LİF TEKNOLOJİLERİ, Postgraduate, 2010 - 2011  
TEKSTİL VE POLIMER FİZİGININ ESASLARI, Doctorate, 2009 - 2010  
YABANCI DİLDE OKUMA VE KONUSMA, Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007  
BITİRME ODEVİ, Undergraduate, 2008 - 2009  
MESLEKİ YABANCI DİL I, Undergraduate, 2008 - 2009, 2007 - 2008, 2006 - 2007  
LİF BİLGİSİ , Undergraduate, 2005 - 2006  
FINAL YEAR PROJECT (MANCHESTER UNIVERSITY), Undergraduate, 1997 - 1998, 1996 - 1997, 1995 - 1996, 1994 - 1995  
HIGH PERFORMANCE FIBRES (MANCHESTER UNIVERSITY) , Postgraduate, 1997 - 1998, 1996 - 1997, 1995 - 1996  
COMPUTING PRACTICALS (MANCHESTER UNIVERSITY), Undergraduate, 1997 - 1998, 1996 - 1997, 1995 - 1996, 1994 - 1995  
MICROSCOPY AND IMAGE ANALYSIS (MANCHESTER UNIVERSITY) , Undergraduate, 1997 - 1998, 1996 - 1997, 1995 -

1996, 1994 - 1995

TEXTURING (MANCHESTER UNIVERSITY), Undergraduate, 1997 - 1998, 1996 - 1997, 1995 - 1996, 1994 - 1995

HIGH PERFORMANCE FIBRES (MANCHESTER UNIVERSITY) , Postgraduate, 1994 - 1995

## Advising Theses

KARACAN I., Karbon nanotüp esashı yüksek performanslı liflerin üretim yöntemleri, mekanik ve yapısal özellikleri ve uygulama alanları, Postgraduate, Ü.KIRKBAŞ(Student), 2016

KARACAN I., Hızlandırılmış Oksidasyon Aşamasının Poliakrilonitril (PAN) esashı Karbon Lif Üretimi Sırasında Değerlendirilmesi ve Etkilerinin Araştırılması, Postgraduate, A.KILIÇ(Student), 2015

KARACAN I., POLİ(HEKZAMETİLEN ADİPAMİT) (POLİAMİT 66) ESASLI KARBON LİF ÜRETİMİ SIRASINDA ANTİOKSİDAN KULLANIMININ TERMAL STABİLİZASYON VE KARBONİZASYON AŞAMALARINA ETKİLERİNİN ARAŞTIRILMASI, YAPISAL VE MEKANİK ÖZELLİKLERİN KARAKTERİZE EDİLMESİ, Postgraduate, L.ERZURULUOĞLU(Student), 2015

KARACAN I., NANOBİLİM VE NANOTEKNOLOJİ YÖNTEMLERİ İLE TEKSTİL YÜZEYLERİNE KAZANDIRILAN ÇOKLU FONKSİYONEL ÖZELLİKLERİNİN, KARAKTERİZASYON YÖNTEMLERİNİN VE KULLANIM ALANLARININ ARAŞTIRILMASI ÜZERİNE BİR ÇALIŞMA, Postgraduate, O.AYAS(Student), 2015

KARACAN I., Alifatik naylon 6 liflerinin karbon lif üretiminde hammaddede olarak değerlendirilmesi ve karakterize edilmesi, Postgraduate, H.Meşeli(Student), 2014

KARACAN I., Selüloz esashı karbon lif üretiminde ısıl kararlılık ve karbonizasyon aşamalarının yerine getirilmesi, Postgraduate, A.Gül(Student), 2014

KARACAN I., Karbon lif üretimi açısından poliamid 6.6 (naylon 6.6) liflerinin değerlendirilmesi ve termal stabilizasyon aşamasının yerine getirilmesi, Postgraduate, K.Şahin(Student), 2012

KARACAN I., Aktif-Karbonizasyon Öncesi Selüloz Esashı Tekstil Malzemelerine Termal Kararlılığın Sağlanması ve Yapısal Özelliklerinin Araştırılması, Postgraduate, T.SOY(Student), 2012

KARACAN I., Türkiye'de Üretilen Poliakrilonitril (PAN) Esashı Akrilik Liflerinin Karbonizasyon Öncesi Oksidasyon Aşamasının Hızlandırılması ve Karakterizasyonu, Postgraduate, G.ERDOĞAN(Student), 2009

KARACAN I., Türkiye'de Üretilen Polipropilen Liflerinin Üretim Parametreleri-Mekanik Özellikleri-Molekül Yapısı Arasındaki İlişkilerin araştırılması ve Bu İlişkilerin İyileştirilmesi, Postgraduate, H.BENLİ(Student), 2008

## Jury Memberships

Associate Professor Exam, DOÇENTLİK SINAV JÜRİSİ, DOKUZ EYLÜL ÜNİVESİTESİ, October, 2017

Associate Professor Exam, DOÇENTLİK SINAVI, İSTANBUL TEKNİK ÜNİVESİTESİ, October, 2017

Associate Professor Exam, DOÇENTLİK SINAVI, ULUDAĞ ÜNİVERSİTESİ, October, 2015

Post Graduate, KİLİM DESENLİ DENİM KUMAŞ ÜRETİMİ, ERCİYES ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ , July, 2007

Post Graduate, MAKİNE HALİSİ ÜRETİM PARAMETRELERİNİN HALİ PERFORMANSINA OLAN ETKİLERİNİN

ARAŞTIRILMASI, SÜTCÜ İMAM ÜNİVERSİTESİ, FEN BİLİMLERİ ENSTİTÜSÜ, September, 2006

## Published journal articles indexed by SCI, SSCI, and AHCI

### I. An Evaluation of the Beneficial Effects of Polyamide 6's Thermal Stabilization by Ferric Chloride Complexation as a Novel Carbon Fiber Precursor

Demirel T., Tunçel K. Ş., KARACAN İ.

Fibers and Polymers, vol.25, no.4, pp.1301-1312, 2024 (SCI-Expanded)

### II. A Study on Structural Characterization of Thermally Stabilized PAN Precursor Fibers Impregnated with Ammonium Bromide before Carbonization Stage

Demirel T., Rahman M. M., Tunçel K. S., KARACAN İ.

FIBERS AND POLYMERS, vol.23, no.11, pp.3046-3057, 2022 (SCI-Expanded)

- III. **The beneficial effect of eco-friendly chemical impregnation on the thermal stabilization process of poly(hexamethylene adipamide) multifilament**  
Rahman M. M., Demirel T., Tuncel K. S., KARACAN İ.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1259, 2022 (SCI-Expanded)
- IV. **Improved thermal stability of jute fiber as an eco-friendly precursor for activated carbon fiber processing**  
Rahman M., KARACAN İ.  
JOURNAL OF POLYMER RESEARCH, vol.29, no.6, 2022 (SCI-Expanded)
- V. **Fabrication of carbon fibers from the cupric ion impregnated and thermally stabilized poly(hexamethylene adipamide) precursor**  
Erzurumluoglu L., Rahman M. M., Demirel T., KARACAN İ.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.51, no.3\_suppl, 2022 (SCI-Expanded)
- VI. **The impact of guanidine carbonate incorporation on the molecular structure of polyacrylonitrile precursor fiber stabilized by a multistep heat treatment strategy**  
Tuncel K. S., Rahman M. M., Demirel T., KARACAN İ.  
POLYMER ENGINEERING AND SCIENCE, vol.62, no.4, pp.1081-1095, 2022 (SCI-Expanded)
- VII. **The impact of eco-friendly chemical incorporation on the thermal oxidation process of flax fiber prior to carbonization and activation**  
Rahman M. M., KARACAN İ.  
JOURNAL OF MATERIALS SCIENCE, vol.57, no.3, pp.2318-2333, 2022 (SCI-Expanded)
- VIII. **Structural and Thermal Characterization of Chemically Pretreated and Thermally Oxidized Bamboo Fiber in Activated Carbon Fiber Manufacturing**  
Rahman M. M., KARACAN İ.  
JOURNAL OF NATURAL FIBERS, vol.19, no.16, pp.15085-15099, 2022 (SCI-Expanded)
- IX. **The effect of the ammonium persulfate and a multi-step annealing approach during thermal stabilization of polyacrylonitrile multifilament prior to carbonization**  
Rahman M. M., Demirel T., Tuncel K. S., KARACAN İ.  
JOURNAL OF MATERIALS SCIENCE, vol.56, no.26, pp.14844-14865, 2021 (SCI-Expanded)
- X. **Characterization of amorphous carbon fibers produced from thermally stabilized polyamide 6 fibers**  
KARACAN İ., Meşeli H.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.47, no.6, pp.1185-1211, 2018 (SCI-Expanded)
- XI. **Polyacrylonitrile/polyaniline composite nanofiber webs with electrostatic discharge properties**  
Kizildag N., Uçar N., Onen A., KARACAN İ.  
JOURNAL OF COMPOSITE MATERIALS, vol.50, no.28, pp.3981-3994, 2016 (SCI-Expanded)
- XII. **Polyacrylonitrile/polyaniline composite nano/microfiber webs produced by different dopants and solvents**  
KIZILDAĞ N., UÇAR N., ÖNEN A., KARACAN İ.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.46, no.3, pp.787-808, 2016 (SCI-Expanded)
- XIII. **Synergistic effect of polyaniline, nanosilver, and carbon nanotube mixtures on the structure and properties of polyacrylonitrile composite nanofiber**  
Eren O., Uçar N., Onen A., Kizildag N., KARACAN İ.  
JOURNAL OF COMPOSITE MATERIALS, vol.50, no.15, pp.2073-2086, 2016 (SCI-Expanded)
- XIV. **The effect of dispersion technique, silver particle loading, and reduction method on the properties of polyacrylonitrile-silver composite nanofiber**  
Demirsoy N., Uçar N., Onen A., KARACAN İ., Kizildag N., Eren O., Borazan İ.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.45, no.6, pp.1173-1187, 2016 (SCI-Expanded)
- XV. **The effect of the dissolution process and the polyaniline content on the properties of polyacrylonitrile-polyaniline composite nanoweb**  
Kizildag N., Uçar N., KARACAN İ., Onen A., Demirsoy N.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.45, no.6, pp.1548-1570, 2016 (SCI-Expanded)
- XVI. **Effect of differently functionalized carbon nanotubes on the properties of composite nanofibres**

- Eren O., Uçar N., Onen A., KARACAN I., Kızıldag N., Demirsoy N., Vurur O. F., Borazan I.  
Indian Journal of Fibre and Textile Research, vol.41, no.2, pp.138-144, 2016 (SCI-Expanded)
- XVII. **Polyacrylonitrile-Polyaniline Composite Nanofiber Webs: Effects of Solvents, Redoping Process and Dispersion Technique**  
Uçar N., Kızıldag N., Onen A., KARACAN I., Eren O.  
FIBERS AND POLYMERS, vol.16, no.10, pp.2223-2236, 2015 (SCI-Expanded)
- XVIII. **The effect of carbonization temperature on the structure and properties of carbon fibers prepared from poly(m-phenylene isophthalamide) precursor**  
KARACAN I., Erzurumluoğlu L.  
FIBERS AND POLYMERS, vol.16, no.8, pp.1629-1645, 2015 (SCI-Expanded)
- XIX. **Formation of Non-graphitizing Carbon Fibers Prepared from Poly(p-phenylene terephthalamide) Precursor Fibers**  
KARACAN I., ERZURUMLUOGLU L.  
FIBERS AND POLYMERS, vol.16, no.5, pp.961-974, 2015 (SCI-Expanded)
- XX. **The effect of reduction methods and stabilizer (PVP) on the properties of polyacrylonitrile (PAN) composite nanofibers in the presence of nanosilver**  
Uçar N., Demirsoy N., Onen A., KARACAN I., Kızıldag N., Eren O., Vurur O. F., Sezer E., Ustamehmetoglu B.  
JOURNAL OF MATERIALS SCIENCE, vol.50, no.4, pp.1855-1864, 2015 (SCI-Expanded)
- XXI. **Carbonization behavior of oxidized viscose rayon fibers in the presence of boric acid-phosphoric acid impregnation**  
KARACAN I., GÜL A.  
JOURNAL OF MATERIALS SCIENCE, vol.49, no.21, pp.7462-7475, 2014 (SCI-Expanded)
- XXII. **THE EFFECT OF POLYANILINE AND AMINE FUNCTIONALIZED CARBON NANOTUBES ON THE PROPERTIES OF COMPOSITE NANOFIBER WEB**  
Uçar N., Eren O., Onen A., Kızıldag N., Demirsoy N., KARACAN I.  
TEKSTİL VE KONFEKSİYON, vol.24, no.3, pp.266-271, 2014 (SCI-Expanded)
- XXIII. **Thermal stabilization of poly(hexamethylene adipamide) fibers in the presence of ferric chloride prior to carbonization**  
KARACAN I., Tunçel K. S.  
POLYMER DEGRADATION AND STABILITY, vol.98, no.9, pp.1869-1881, 2013 (SCI-Expanded)
- XXIV. **Investigation of structural transformations taking place during oxidative stabilization of viscose rayon precursor fibers prior to carbonization and activation**  
Karacan I., Soy T.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1041, pp.29-38, 2013 (SCI-Expanded)
- XXV. **Enhancement of Oxidative Stabilization of Viscose Rayon Fibers Impregnated with Ammonium Sulfate Prior to Carbonization and Activation Steps**  
Karacan I., Soy T.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.128, no.2, pp.1239-1249, 2013 (SCI-Expanded)
- XXVI. **Structure and properties of oxidatively stabilized viscose rayon fibers impregnated with boric acid and phosphoric acid prior to carbonization and activation steps**  
Karacan I., Soy T.  
JOURNAL OF MATERIALS SCIENCE, vol.48, no.5, pp.2009-2021, 2013 (SCI-Expanded)
- XXVII. **Ferric Chloride Assisted Thermal Stabilization of Polyacrylonitrile Precursor Fibers Prior to Carbonization**  
Karacan I., Erdogan G.  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, vol.22, no.5, pp.1016-1027, 2012 (SCI-Expanded)
- XXVIII. **The Role of Thermal Stabilization on the Structure and Mechanical Properties of Polyacrylonitrile Precursor Fibers**  
KARACAN I., Erdogan G.  
FIBERS AND POLYMERS, vol.13, no.7, pp.855-863, 2012 (SCI-Expanded)

- XXIX. **Investigation of the Effect of Cupric Chloride on Thermal Stabilization of Polyamide 6 as Carbon Fiber Precursor**  
KARACAN I., Baysal G.  
FIBERS AND POLYMERS, vol.13, no.7, pp.864-873, 2012 (SCI-Expanded)
- XXX. **The role of dry and wet isothermal annealing treatment on the structure and the mechanical properties of isotactic polypropylene fibers**  
KARACAN I., BENLİ H.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.124, no.4, pp.3037-3050, 2012 (SCI-Expanded)
- XXXI. **An investigation on structure characterization of thermally stabilized polyacrylonitrile precursor fibers pretreated with guanidine carbonate prior to carbonization**  
KARACAN I., Erdogan G.  
POLYMER ENGINEERING AND SCIENCE, vol.52, no.5, pp.937-952, 2012 (SCI-Expanded)
- XXXII. **The Effect of Sulfonation Treatment on the Structure and Properties of Isotactic Polypropylene Fibers Prior to the Carbonization Stage**  
KARACAN I., BENLİ H.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.123, no.6, pp.3375-3389, 2012 (SCI-Expanded)
- XXXIII. **A Study on Structural Characterization of Thermal Stabilization Stage of Polyacrylonitrile Fibers Prior to Carbonization**  
KARACAN I., Erdogan G.  
FIBERS AND POLYMERS, vol.13, no.3, pp.329-338, 2012 (SCI-Expanded)
- XXXIV. **The Influence of Thermal Stabilization Stage on the Molecular Structure of Polyacrylonitrile Fibers Prior to the Carbonization Stage**  
KARACAN I., Erdogan G.  
FIBERS AND POLYMERS, vol.13, no.3, pp.295-302, 2012 (SCI-Expanded)
- XXXV. **The effect of ethylenediamine pretreatment on the molecular structure of thermally stabilized polyacrylonitrile fibers before carbonization**  
KARACAN I., Erdogan G.  
POLYMER ENGINEERING AND SCIENCE, vol.52, no.3, pp.467-480, 2012 (SCI-Expanded)
- XXXVI. **Use of Sulfonation Procedure for the Development of Thermally Stabilized Isotactic Polypropylene Fibers Prior to Carbonization**  
KARACAN I., BENLİ H.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.123, no.1, pp.234-245, 2012 (SCI-Expanded)
- XXXVII. **The Influence of Annealing Treatment on the Molecular Structure and the Mechanical Properties of Isotactic Polypropylene Fibers**  
KARACAN I., BENLİ H.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.122, no.5, pp.3322-3338, 2011 (SCI-Expanded)
- XXXVIII. **AN X-RAY DIFFRACTION STUDY FOR ISOTACTIC POLYPROPYLENE FIBRES PRODUCED WITH TAKE-UP SPEEDS OF 2500-4250 M/MIN**  
KARACAN I., BENLİ H.  
TEKSTİL VE KONFEKSIYON, vol.21, no.3, pp.201-209, 2011 (SCI-Expanded)
- XXXIX. **THE USE OF INFRARED-SPECTROSCOPY TECHNIQUE FOR THE STRUCTURAL CHARACTERIZATION OF ISOTACTIC POLYPROPYLENE FIBRES**  
KARACAN I., BENLİ H.  
TEKSTİL VE KONFEKSIYON, vol.21, no.2, pp.116-123, 2011 (SCI-Expanded)
- XL. **Molecular structure and orientation of gel-spun polyethylene fibers**  
Karacan I.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.101, no.3, pp.1317-1333, 2006 (SCI-Expanded)
- XLI. **A comparative study of structure-property relationships in highly oriented thermoplastic and thermotropic polyesters with different chemical structures**  
Karacan I.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.100, no.1, pp.142-160, 2006 (SCI-Expanded)

- XLII. **Structure-property relationships in high-strength high-modulus polyethylene fibres**  
Karacan I.  
FIBRES & TEXTILES IN EASTERN EUROPE, vol.13, no.4, pp.15-21, 2005 (SCI-Expanded)
- XLIII. **X-ray diffraction studies of poly(aryl ether ether ketone) fibers with different degrees of crystallinity and orientation**  
Karacan I.  
FIBERS AND POLYMERS, vol.6, no.3, pp.206-218, 2005 (SCI-Expanded)
- XLIV. **An in depth study of crystallinity, crystallite size and orientation measurements of a selection of poly(ethylene terephthalate) fibers**  
Karacan I.  
FIBERS AND POLYMERS, vol.6, no.3, pp.186-199, 2005 (SCI-Expanded)
- XLV. **Traumatic spinal cord injuries in Turkey: a nation-wide epidemiological study**  
Karacan I., KOYUNCU H., PEKEL O., SUMBULOGLU G., Kirnap M., DURSUN H., KALKAN A., CENGIZ A., YALINKILIC A., UNALAN H., et al.  
SPINAL CORD, vol.38, no.11, pp.697-701, 2000 (SCI-Expanded)
- XLVI. **Characterisation of Structure and Properties of Polyacrylonitrile-Based Acrylic Fibres**  
Bozdoğan F., KARACAN İ., Kitagawa T.  
JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY, vol.8, no.3, pp.119-139, 2000 (SCI-Expanded)
- XLVII. **Thermotropic polyesters: synthesis and properties of modified poly(4-oxybenzoate-co-1,4-phenylene isophthalate)s**  
Cao J., Erdemir A., KARACAN İ., Tomka J.  
POLYMER, vol.36, no.24, pp.4695-4701, 1995 (SCI-Expanded)
- XLVIII. **Thermotropic polyesters: thermal transitions and polymorphism of poly(4-oxybenzoate-co-1,4-phenylene isophthalate)s**  
Cao J., KARACAN İ., Tomka J.  
POLYMER, vol.36, no.24, pp.2133-2141, 1995 (SCI-Expanded)
- XLIX. **Molecular orientation in uniaxially, one-way and two-way drawn PVC films**  
KARACAN İ., Bower D., Ward I.  
POLYMER, vol.35, no.16, pp.3411-3422, 1994 (SCI-Expanded)
- L. **Thermotropic polyesters: structure of poly(p-oxybenzoate-co-m-phenylene terephthalate) fibres**  
Johnson D., KARACAN İ., Tomka J.  
POLYMER, vol.34, no.8, pp.1749-1754, 1993 (SCI-Expanded)
- LI. **CHARACTERIZATION OF ORIENTATION OF ONE-WAY AND 2-WAY DRAWN ISOTACTIC POLYPROPYLENE FILMS**  
KARACAN İ., Taraiya A., Bower D., Ward I.  
POLYMER, vol.34, no.13, pp.2691-2701, 1993 (SCI-Expanded)
- LII. **Thermotropic polyesters: effect of m-phenylene disruptors on chain modulus**  
Johnson D., KARACAN İ., Tomka J.  
POLYMER, vol.33, no.5, pp.983-989, 1992 (SCI-Expanded)
- LIII. **Thermotropic polyesters: orientation of poly(p-oxybenzoate-co-p-phenylene isophthalate) fibres**  
Johnson D., KARACAN İ., Tomka J.  
POLYMER, vol.32, no.13, pp.2312-2318, 1991 (SCI-Expanded)
- LIV. **Thermotropic polyesters: Synthesis and properties of poly(p-oxybenzoate-co-m-phenylene terephthalate)s**  
Brown P., KARACAN İ., Liu J., McIntyre J., Milburn A., Tomka J.  
POLYMER INTERNATIONAL, vol.24, no.1, pp.23-32, 1991 (SCI-Expanded)
- LV. **Thermotropic polyesters: structure of poly(chloro-1,4 phenylene terephthalate) and its copolymers**  
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## Scientific Consultations

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## Metrics

Publication: 73

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H-Index (WoS): 13

H-Index (Scopus): 11

## Congress and Symposium Activities

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## **Scholarships**

Yabancı dil, lisans ve lisans üstü (Doktora) eğitim bursu (Ingiltere), Sümerbank (1977-1986), Other Government Agencies, 1980 - Continues

## **Awards**

KARACAN I., BİLİMSEL YAYIN ÖDÜLÜ, TUBITAK, December 2013

KARACAN I., BİLİMSEL YAYIN ÖDÜLÜ, TUBITAK, December 2012

KARACAN I., BİLİMSEL YAYIN ONUR ÖDÜLÜ, ERCİYES ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ, October 2012

KARACAN I., BİLİMSEL YAYIN ÖDÜLÜ, TUBITAK, November 2011

KARACAN I., BİLİMSEL YAYIN ONUR ÖDÜLÜ, ERCİYES ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ, October 2005

KARACAN I., FELLOW OF THE TEXTILE INSTITUTE, THE TEXTILE INSTITUTE, UNITED KINGDOM, March 1996

KARACAN I., CHARTERED PHYSICIST, THE INSTITUTE OF PHYSICS, UNITED KINGDOM, January 1994

KARACAN I., ASSOCIATE OF THE TEXTILE INSTITUTE, THE TEXTILE INSTITUTE, UNITED KINGDOM, January 1990

## **Non Academic Experience**

Business Establishment Private, Ay-Star Tekstil Ltd. Şti, Kalite-Kontrol

Ay-Star Tekstil Ltd Şti.

Other Public Institution, Tubitak, Tekstil Enstitüsü

TUBITAK, Tekstil Enstitüsü (Bursa)

Business Establishment Private, Korteks Mensucat Sanayi Ve Ticaret Aş, Bursa, Araştırma-Geliştirme

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