

## Organization

- Turkish Scientific Association of Prosthetics and Orthotics
- National ISPO

## Honorary Presidents

Prof.M.D. Rıdvan EGE  
Prof.M.D. Hidayet ERDEM

## Organising Committee

Prof.P.T. Serap Alsancak (President)  
Prof.M.D. Kamil Yazıcıoğlu (Vice President)  
Assoc.Prof.P.T. Kezban Bayramlar (General Secretary)  
M.Sc.Eng. Haydar Altınkaynak (Treasurer)  
Prof.M.D. Sabri Ateşalp (Member)  
M.D.Ph.D. Evren Erdem (Member)  
Eng.İlhan Şahin (Member)  
P.O.Tech. Ahmet Pürgü (Member)

## International Invited Speakers and Chairs

M.D. Jan H.B. Geertzen	NEDHERLANDS (ISPO President)
Eng. Raid Alkhatab	JORDAN
Karl Heinz Burghardt	GERMANY
P.O. Alexander Hardt	GERMANY
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Eng. Laurence Kenney	ENGLAND
Eng. Edward Lemaire	CANADA
David de Magtige	ENGLAND
PO Gaurav Mishra	ENGLAND
M.D. Georg Neff	GERMANY
M.D. Turk Nour	LEBANON
Eng. Dick H. Plettenburg	NETHERLANDS
P.O. Andreas Samson	GERMANY
P.O. Sandra Sexton	SCOTLAND
Douglas Turner	USA
P.O. Martin Wehrle	GERMANY

## Acknowledgements

TSAPO and National ISPO wish to acknowledge their support for the Congress which is being provided by Ankara University, GATA and Ortopaedic Prosthetics and Orthotics Association.

## Welcome

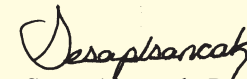
Welcome to the 7<sup>th</sup> National Prosthetics and Orthotics Congress with International Participants, the most amazing museum example, Military Museum and the capital city of three empires; a unique link between East and West, past and present, Istanbul.

The congress is the third organization hosted by Turkish Scientific Association of Prosthetics and Orthotics (TSAPO) and International Society for Prosthetics and Orthotics (ISPO). In addition to this, for the second time, the congress brings together scientists from Middle East working in the area of prosthetics and orthotics. We are very pleasure to have among us both foreign participants and Turkish participants from every region of Republic of Turkey.

Our national congress is held once every two years and draws professionals, consumers, manufacturers and students engaged in prosthetics and orthotics. As TSAPO and National ISPO we believe that this congress is beneficial with the scientific presentations, technical workshops, satellite symposiums and trade exhibitions. The social program which includes welcome reception, gala dinner, Sema show, Istanbul city sightseeing tour gives opportunity to meet and helps participants to get acquainted.

Turkey is an important bridge between Asia and Europe. We also believe that Turkey will be playing host to one of the international prosthetics and orthotics congresses and provide scientific, social and cultural improvements in future.

As congress organizing committee, we would like to our sincerest thanks to share the scientific expertise and experience of our national and international participants. We hope that the 7<sup>th</sup> National Prosthetics and Orthotics Congress will be unforgettable events for all of us in our fascinating Istanbul.



Serap Alsancak, Prof.P.T.  
President of the Congress

## PROGRAM

	14 September 2009, Monday	15 September 2009, Tuesday	16 September 2009, Wednesday	17 September 2009, Thursday
09.00-15.00 09.00	<b>REGISTRATION</b>	<b>Instructional Course I</b> Selection criteria and fitting of the prefabricate orthoses-Lower extremity  <b>Instructional Course II</b> Selection criteria and fitting of the prefabricate orthoses -Upper extremity and vertebra	<b>Plenary Session V</b> Ideal P&O education module	<b>Technical Workshop III</b> Myoelectric transhumeral prosthesis; Design and casting  <b>Technical Workshop IV</b> TLSO- cheneau in idiopathic scoliosis; Casting and principles of biomechanic
10.00	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>
10.30		<b>Symposium I</b> Trauma and Orthotics  <b>Symposium II</b> Medical problems of amputees	<b>Symposium III</b> Present and future of prosthetics and orthotics education in Turkey	<b>Technical Workshop V</b> Myoelectric transhumeral prosthesis; Manufacture and fitting  <b>Technical Workshop VI</b> TLSO- cheneau in idiopathic scoliosis; Manufacture and fitting
12.00	<b>Lunch</b>	<b>SATELLITE SYMPOSIUM - Lunch</b>	<b>SATELLITE SYMPOSIUM - Lunch</b>	<b>Lunch</b>
13.30	<b>Technical Workshop I</b> Silicone partial foot prosthesis; Design, casting, manufacture and fitting	<b>Plenary Session II</b> Hind foot stumps; Modified Chopart, Pirogoff, Boyd and Syme amputations and P&O supply  <b>Plenary Session III</b> Upper extremity prosthetics. Current status, evaluation and future perspective  <b>Instructional Course III</b> Problem sources in lower limb prostheses	<b>Plenary Session VI</b> Functional electrical stimulation following stroke-recent advances  <b>Plenary Session VII</b> Orthotics and future  <b>Plenary Session VIII</b> Prosthetics and future	<b>Instructional Course IX</b> Touch bionics and Its characteristics; Training and outcome measures for upper limb myo-prosthesis users  <b>Symposium IV</b> Factors affecting of the myoelectric prosthetic control
15.00	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>
15.30	<b>Technical Workshop II</b> Silicone partial finger and hand prosthesis	<b>Free Papers</b>  <b>Plenary Session IV</b> Overview of the technology and Applications in orthotics	<b>Free Papers</b>  <b>Instructional Course VI</b> Limited opportunities in prosthetics and orthotics applications and performance criteria for production	<b>Instructional Course X</b> Expectations of P&O professionals  <b>Plenary Session IX</b> Response of P&O service Ministry of Health
16.30	<b>OPENING CEREMONY</b>	<b>Instructional Course IV</b> Gait analysis and energy consumption in prosthesis users  <b>Instructional Course V</b> Gait analysis and energy consumption in orthosis users	<b>Instructional Course VII</b> Prosthetics and orthotics service and developments in Middle-East countries  <b>Instructional Course VIII</b> Prosthetics and orthotics applications in firearm and mine injuries	<b>CLOSING CEREMONY and Presentation of Awards</b>
17.45-18.15	<b>Plenary Session I</b> Skin problems of the amputee stump			<b> TSAPO and National ISPO Executive Committee (Closed)</b>  <b>Meeting of Prosthetics and Orthotics Associations (Closed)</b>
19.00	<b>WELCOME RECEPTION</b>	<b>19.00 SEMA SHOW</b>	<b>19.00 GALA DINNER</b>	<b>09.00 ISTANBUL CITY TOUR (18 September 2009, Friday)</b>

## Scientific Committee

Zülfikar Akar	Disabled Confederation
M.D. Selami Akkuş	Ankara Rehabilitation Center
M.D. Gülseren Akyüz	Marmara University
P.T. Candan Algun	Dokuz Eylül University
M.D. Mümtaz Alpaslan	Hacettepe University
P.O. Tech. Hidayet Alpınar	Private P&O Center
M.D. Tansu Arasıl	Ankara University
M.D. Mesut B. Atay	Ankara University
M.D. Resa Aydın	İstanbul University
M.D. Mustafa Başbozkurt	Gülhane Military Medical Academy
P.T. Kılıçhan Bayar	Muğla University
P.O. Tech. Cem Bölükbaşı	Private P&O Center
M.D. Ayşegül Çakmak	İstanbul University
M.D. Salih Çetinkurşun	Afyon Kocatepe University
M.D. Derya Dinçer	Ankara University
M.D. Kemal Dinçer	Gülhane Military Medical Academy
P.T. Ferda Dokuztuğ	Haliç University
M.D. Süreyya Ergin	Ankara University
M.D. Belgin Ertan	İstanbul Rehabilitation Hospital
M.D. Orhan Girgin	Ufuk University
M.D. Haydar Gök	Ankara University
M.D. Salim Göktepe	TAF Rehabilitation and Care Center
P.O. Tech. Özgen Güven	Hacettepe University
M.D. Zafer Haşçelik	Hacettepe University
P.T. Hülya Kayıhan	Hacettepe University
P.O. Tech. Murat Kılıç	Hacettepe University
M.D. Banu Kiran	Şişli Etfal Training and Research Hospital
Tech. Edu. Necmettin Konaşkan	Bahçelievler Ortopedics Technician High School
M.D. Emin Mavili	Hacettepe University
M.D. Jale Meral	Gazi University
M.D. Serdar Necmioğlu	Dicle University
M.D. Kadriye Öneş	İstanbul Rehabilitation Hospital
P.T. Arzu Özdiñler	İstanbul University
P.O. Tech. Nigar Özgöncü	Ankara University
M.D. Kutay Engin Özturan	Abant İzzet Baysal University
M.D. Tunç Cevat Övün	Selçuk University
M.D. Halit Özyalçın	Ege University
M.D. Nurdan Paker	İstanbul Rehabilitation Hospital
P.T. Gülden Polat	Marmara University
M.D. Sinan Seber	Osmangazi University
M.D. Vesile Sepici	Gazi University
M.D. Ertuğrul Şener	Gazi University
P.T. Hanifegül Taşkıran	Trakya University
M.D. Mehmet Tosun	Karadeniz Technical University
M.D. Safiye Tuncer	Ankara University
P.T. Özlem Ülger	Hacettepe University
P.T. Nesrin Yağcı	Pamukkale University
P.T. Yavuz Yakut	Hacettepe University
P.O. Tech. Ramazan Yaraneri	Private P&O Center
M.D. Evren Yaşar	TAF Rehabilitation and Care Center
P.T. Ufuk Yurdalan	Marmara University

## PROGRAM

14 September 2009, Monday

09.00-15.00 REGISTRATION

10.00 Break

12.00 Lunch

13.30 Technical Workshop I

Chairs:

P.O.Tech. Mehmet Doğan; P.O.Tech. Necati Çayırılı

**Silicone partial foot prosthesis;**

**Design, casting, manufacture and fitting**

P.O.Tech. Yusuf Seyrek, P.O.Tech. Mutlu Fehim

**Saloon B**

15.00 Break

15.30 Technical Workshop II

Chairs:

M.D. H. Selim Karabekir; P.O.Tech. Mehmet Şengöz

**Silicone partial finger and hand prosthesis**

P.O.Tech. Mehmet Zeki Çulcu

**Saloon B**

16.30 OPENING CEREMONY

**Saloon A**

17.45-18.15 Plenary Session I

Chair:

M.D. Hüseyin Özkan

**Skin problems of the amputee stump**

M.D. Jan H.B. Geertzen, NETHERLANDS

**Saloon A**

19.00 WELCOME RECEPTION

## PROGRAM

15 September 2009, Tuesday

- 09.00**            **Instructional Course I**  
Chair:  
M.D. Mesih Kuşkucu  
**Selection criteria and fitting of the prefabricate orthoses-Lower extremity**  
M.D. Mahir Mahiroğlu; P.T. Engin Şimşek  
**Saloon A**
- Instructional Course II**  
Chair:  
M.D. Belgin Erhan  
**Selection criteria and fitting of the prefabricate orthoses -Upper extremity and vertebra**  
M.D. Engin Çakar; P.T. Ebru Turan  
**Saloon B**
- 10.00**            **Break**
- 10.30**            **Symposium I**  
Chair:  
M.D. Nevres Aydoğan  
**Trauma and Orthotics**  
M.D. Bahadır Alemdaroğlu; P.T. Filiz Can;  
P.O. Tech. Muharrem Şimşek  
**Saloon A**
- Symposium II**  
Chair:  
M.D. M. Zeki Kıralp  
**Medical problems of amputees**  
M.D. İsmail Safaz; M.D. Ümit Dinçer;  
M.D. İlknur Tuğcu  
**Saloon B**

## PROGRAM

15 September 2009, Tuesday

- 12.00**            **SATELLITE SYMPOSIUM - Lunch**  
**Socket technologies in prostheses and materials**  
P.O. Andreas Samson, Otto Bock, GERMANY  
**Saloon A**
- 13.30**            **Plenary Session II**  
Chair:  
M.D. Ünal Kuzgun  
**Hind foot stumps; Modified Chopart, Pirogoff, Boyd and Syme amputations and Prosthetics and Orthotics supply**  
M.D. Georg Neff, GERMANY  
**Saloon A**
- Plenary Session III**  
Chair:  
M.D. Georg Neff, GERMANY  
**Upper extremity prosthetics; Current status, evaluation and future perspective**  
Eng. Dick H. Plettenburg, NETHERLAND  
**Saloon A**
- Instructional Course III**  
Chair:  
P.T. Fatih Erbahçeci  
**Problem sources in lower limb prostheses**  
M.D. Çağatay Öztürk; P.T. Yasemin Kavlak;  
P.O.Tech. Ahmet Pürgü  
**Saloon B**
- 15.00**            **Break**

## PROGRAM

15 September 2009, Tuesday

15.30 Free Papers (n:5)

Chair:  
M.D. Kemal Dinçer

**A preliminary study for the development of orthopedic orthotics and prosthetics profession's ethical values in Turkey**

M.Hidayet Alpınar

**Assesment of vocational status in amputees**  
Semra Topuz, Kezban Bayramlar, Özlem Ülger,  
Aydın Meriç, Fatih Erbahçeci, Gül Şener

**Ear prosthesis application in case with the ear amputation**

Mutlu Natife Fehim, Yusuf Seyrek

**Application and design of hard socket with silicone window in a case with knee desarticulation**

İzzettin Alıcı

**Being introduced to a prostheses after 60 years**

Semra Topuz, Özlem Ülger, Ahmet Pürgü,  
Kezban Bayramlar, Fatih Erbahçeci, Gül Şener

**Saloon B**

**Plenary Session IV**

Chair:  
P.T. Gül Şener

**Overview of the technology and applications in orthotics**

Eng. Edward Lemaire, CANADA

**Saloon A**

## PROGRAM

15 September 2009, Tuesday

16.30 Instructional Course IV

Chair:  
M.D. Kamil Yazıcıoğlu  
**Gait analysis and energy consumption in prosthesis users**

M.D. Evren Yaşar; M.D. Bilge Yılmaz;  
P.T. Özlem Yılmaz

**Saloon A**

**Instructional Course V**

Chair:  
M.D. Haydar Möhür  
**Gait analysis and energy consumption in orthosis users**

M.D. Öznur Öken; P.T. Salih Angın

**Saloon B**

19.00 SEMA SHOW

## PROGRAM

16 September 2009, Wednesday

- 09.00**            **Plenary Session V**  
Chair:  
Eng. Laurence Kenney , ENGLAND  
**Ideal Prosthetics and Orthotics education module**  
P.O. Sandra Sexton, SCOTLAND  
**Saloon A**
- 10.00**            **Break**
- 10.30**            **Symposium III**  
Chairs:  
Math. Sabahattin Balcı; P.O. Sandra Sexton,  
SCOTLAND  
**Present and future of prosthetics and orthotics  
education in Turkey**  
P.T. Serap Alsancak; P.T. Hakan Uysal;  
P.O.Tech. Mustafa Alpaslan;  
P.O.Tech. Necmettin Daştan; Math. Sabahattin Balcı  
**Saloon A**
- 12.00**            **SATELLITE SYMPOSIUM - Lunch**  
**Electronic knees and carbon feet**  
**(Smart Adaptive, E-FEET line)**  
Teknik Ortopedi & Blatchford, ENGLAND  
**Saloon A**
- 13.30**            **Plenary Session VI**  
Chair:  
Douglas Turner, USA  
**Functional electrical stimulation following  
stroke-recent advances**  
Eng. Laurence Kenney , ENGLAND  
**Saloon A**

## PROGRAM

16 September 2009, Wednesday

- Plenary Session VII**  
Chair:  
P.T. Fatma Uygur  
**Orthotics and future**  
Douglas Turner, USA  
**Saloon A**
- Plenary Session VIII**  
Chair:  
P.O. Gaurav Mishra, ENGLAND  
**Prosthetics and future**  
Karl Heinz Burghardt, GERMANY  
**Saloon B**
- 15.00**            **Break**
- 15.30**            **Free Papers (n:5)**  
Chair:  
P.T. Gülden Polat
- Assesment of period of transition to permanent  
prosthesis after amputation**  
Özlem Ülger, Semra Topuz, Özgen Güven,  
Kezban Bayramlar
- Effectiveness of serial orthosis treatment in a subject  
with arthrogyriposis multiplex congenita**  
Gözde Gür, Burcu Dilek, Suat Erel, Nilgün Berk,  
Yavuz Yakut, Fatma Uygur

## PROGRAM

16 September 2009, Wednesday

**Assessment of sit to stand activity in below knee amputees and relationship with knee extensor moment**

Seher Özyürek, Salih Angın

**Investigation of thhe factors affecting usage patterns of polyethylene night splint in children with cerebral palsy and duchenne musculer dystrophy : a pilot study**

Burcu Dilek, Gözde Gür, Suat Erel, Nilgün Berk, Yavuz Yakut, Fatma Uygur

**Design of orthotic and robotic that can be worn with the shape memory alloy**

Umut Altınkaynak

**Saloon B**

**Instructional Course VI**

Chair:

Eng. Haydar Altınkaynak

**Limited opportunities in prosthetics and orthotics applications and performance criteria for Production**

P.O. Tech. Nihal Tırpan; P.O. Tech. Esra Akman

**Saloon A**

## PROGRAM

16 September 2009, Wednesday

16.30

**Instructional Course VII**

Chair:

M.D. A. Sabri Ateşalp

**Prosthetics and orthotics service and developments in Midle-East countries**

M.D. Turk Nour, LEBANON; Eng. Raid Alkhattab, JORDAN

**Saloon A**

**Instructional Course VIII**

Chair:

M.D. Ayşegül Ketenci

**Prosthetics and orthotics applications in firearm and mine injuries**

Dr. Ali Şehirlioğlu; P.O.Tek. Engin Aslan

**Saloon B**

19.00

**GALA DINNER**

## PROGRAM

17 September 2009, Thursday

**09.00 Technical Workshop III**  
Chairs:  
P.O.Tech. Erkan Evrendilek; P.O.Tech. Osman Özant  
**Myoelectric transhumeral prosthesis;  
Design and casting**  
P.O. Martin Wehrle, GERMANY; P.O.Tek. Sabri Şahin  
**Saloon A**

**Technical Workshop IV**  
Chair:  
P.T. Yavuz Yakut  
**TLSO-Cheneau in idiopathic scoliosis;  
Casting and principles of biomechanic**  
M.D. Hürriyet Yılmaz; P.O. Tech. Dursun Mat  
**Saloon B**

**10.00 Break**

**10.30 Technical Workshop V**  
Chairs:  
P.T. Zübeyir Sarı; P.O. Tech. Ecir Demir  
**Myoelectric transhumeral Prosthesis;  
Manufacture and fitting**  
P.O. Martin Wehrle, GERMANY; P.O.Tech. Sabri Şahin  
**Saloon A**

**Technical Workshop VI**  
Chairs:  
P.T. Sevgi Özding; P.O.Tech. Hayati Kaya  
**TLSO-Cheneau in idiopathic scoliosis;  
Manufacture and fitting**  
M.D. Hürriyet Yılmaz; P.O. Tech. Dursun Mat  
**Saloon B**

## PROGRAM

17 September 2009, Thursday

**12.00 Lunch**

**13.30 Instructional Course IX**  
Chairs:  
M.D. Salim Göktepe; P.O. Martin Wehrle, GERMANY  
**Touch bionics and Its characteristics; Training and  
outcome measures for upper limb myo-prosthesis  
users**  
P.O. Gaurav Mishra, ENGLAND  
O.T. Liselotte Hermansson, SWEDEN  
**Saloon A**

### Symposium IV

Chair:  
M.D. Haluk Yetkin  
**Factors affecting of the myoelectric prosthetic control**  
M.D. Sinan Bilgin, P.T. Aydın Meriç; P.T. Semra Topuz;  
P.T. Sevgin Yosmaoğlu; P.O. Tech. Mustafa Demiral  
**Saloon B**

**15.00 Break**

**15.30 Instructional Course X**  
Chairs:  
M.D. Yaşar Tatar; M.D. Evren Erdem  
**Expectations of P&O professionals**  
P.O.Tech. Mustafa Gültekin; P.T. Kezban Bayramlar;  
M.D. Birol Balaban  
**Saloon A**

## PROGRAM

**17 September 2009, Thursday**

**Plenary Session IX**

Chair:

M.D. Hidayet Erdem

**Social Security Institution**

**Saloon A**

**16.30 CLOSING CEREMONY and Presentation of Awards**

**18.00-18.30 TSAPO and National ISPO Executive Committee  
(Closed)**

**Meeting of Prosthetics and Orthotics Associations  
(Closed)**

**Saloon B**

**18 September 2009, Friday**

**09.00 ISTANBUL TOUR**

## Registration and Social Activity Costs

T.C. İş Bank Incesu Branch, Ankara/TURKEY

Account No : 4230154484

## REGISTRATION

Registration Type	Before 21 August	After 21 August
Member ISPO	100 USD	120 USD
Non Member	120 USD	150 USD
Student	20 USD	30 USD
Day Registration	40 USD	45 USD

International participation costs

## SOCIAL ACTIVITIES

Istanbul Tour - Palaces 17 <sup>th</sup> October, 2009	Leave: 9.00 Return: 13.00	Topkapı and Dolmabahçe Palaces	30 USD
Istanbul Tour - Bosphorus 17 <sup>th</sup> October, 2009	Leave: 13.00 Return: 16.00	Bosphorus	30 USD
Mevlevi Sema Show 15 <sup>th</sup> October, 2009		Istanbul Culture Center	15 USD
Gala Dinner 16 <sup>th</sup> October, 2009		Place to be announced	30 USD



**TSAPO**

website: [www.turkprot.org](http://www.turkprot.org)



website: [www.ispoint.org](http://www.ispoint.org)

#### **TSAPO Executive Board**

Prof. P.T. Serap Alsancak  
Prof. M.D. Kamil Yazıcıoğlu  
Assoc. Prof. P.T. Kezban Bayramlar  
MSc. Eng. Haydar Altınkaynak  
P.O. Tech. Ahmet Pürgü

#### **National ISPO Committee**

Prof. P.T. Serap Alsancak  
PhD. M.D. Evren Erdem  
MSc. Eng. Haydar Altınkaynak  
Prof. M.D. Sabri Ateşalp  
Eng. İlhan Şahin  
Assoc. Prof. P.T. Kezban Bayramlar