

The Students are with the Managers at 15th Division



Students and Managers are in Amasya City

# The Opinions of the Students About IAESTE Program :

My name is Agnieszka Glen and I am studying Civil Engineering at the TechnicalUniversity in Rzeszów (Poland). I finished my fourth year of study. I was one of the eight students who were accepted to take part in an IAESTE (International Association for the Exchange of Students for Technical Experience) traineeship in summer 2012. The intention of the following report is to give a briefly summary concerning my impression and experiences during my stay in Turkey. For the whole traineeship in general two different institutions were responsible, therefore the report consists out of two parts, as following:

I. General Directorate Of Highways (KGM) Ankara (24.06-8.07)

II. KGM Izmir 2nd Division (9.7-3.8)

During the first two weeks we received morning's lessons concerning cultural Subjects, like Turkish Lesson or information about the modern Turkish Republic and Atatürk and his Reforms. This information was very interesting and helpful to refresh our knowledge about Turkey and it's development. In the afternoons we were invited to get introduced to the executive staff of KGM. It was a pleasure to meet all this persons and answer their questions.

We have seen a lot of important places in Ankara, of course one morning was reserved to visit the very impressive and interesting Mausoleum of Atatürk.

After one week we went to Black Sea Region where we have visited a lot of beautiful places such as Safranbolu, Bartin, Amasra, Kastamonu, Sinop, Samsun, Amasya. The most beautiful city fo me is Amasya. This city stands in the mountains above the Black Sea coast, in a narrow valley along the banks of the Yesilirmak River. Although near the Black Sea, this area is high above the coast and has an inland climate, well-suited to growing apples, for which the province of Amasya is famed. As for natural beauty, Amasya is set apart from the rest of Anatolia in its tight mountain valley and hides its own secret beauty.

The practical part of intership was in Izmir. We spent four weeks there. During our practical training we worked with different contracting engineering companies, all of which were working on various types of construction: bridges, tunnels, roads, viaducts. All the people were very friendly and helpful and always happy to answer any questions we had.

We visited Konak Tunnel, Karsiyaka Tunnel and Selatin Tunnel. For me tunnels are more intresting because of many problems during building. I'm impressed with using high technology equipment to reach really long tunnels.

The program included also weekends. We had opportunity to visit West Cost of Turkey, a lot of beautiful beaches in Cesme, Gumuldur, Marmaris and Bodrum.

For me this was a fantastic experience and was very valuable from an engineering point of view. I have enjoyed living and working in Turkey and for the TCK and would not hesitate to recommend Turkey, especially the TCK as a place to come for practical experience. Thank you KGM that I was able to meet great people, see items which I had not seen and experienced unforgettable adventure.

#### Agnieszka Glen

Firstly, let me introduce myself, my name is Amel Missaoui, I'm from Tunisia and I'm studying civil engineering at the National School of Engineers of Tunis, and in September I will start my final year of university studies.

To be honest, in the beginning of this experience, I was a little bit afraid because it was my first time alone far away from my family. I was thinking and imagining about how next six weeks would be like? How the Turkish people would be? And if I'm going to find people who can understand me and make this internship easier for me.

On June 25th, at the start of my training, I was SURPRISED ... BUT SURPRISED IN A GOOD WAY, because meeting my fellow trainees and Mr. ILYAS KAMBALI gave me a good feeling about days to come.

First days, we met KGM's directors who gave a general idea about this big company. All the people we met were very hospitable and happy to receive us. There was also a time for few lessons of Turkish language that would be very useful for our stay in turkey.

Even thought I knew the program before coming here, the Black Sea Region trip was unexpected, it was like five days of a dream! Everything was well organized and everyone we met in each city was so kind with us and tried to show us all interesting places in that area and I mustn't forget the traditional food that we tasted in some of the best restaurants of those places! I have to thank all people we met in: KASTAMONOU, SANFRANBULOU, BARTIN, AMASRA, SINOP, SAMSUN and AMASYA. Special thanks go to Mr. ILHAN KAVASOĞLU-division of Training and Evaluation, who thought me some words in Turkish and gave a special mark to this trip and to Mr. KAMURAN YAZICI- department of Program and Monitoring, without whom SINOP's days would not be as they were.

When we came back to Ankara after those touristic days we had lessons in departments of General Directorate of Highways where they introduced us with their obligations and role in projects, and we visited civil engineering department where they gave us some theoretic lessons and showed us there different laboratory. The last place we visited near Ankara was a "çok güzel" city named BEYPAZARI.

August 3rd. the orientation program is finished and our practical training in IZMIR starts.

First week we worked with EGE ASFALT Company contracted in the project site of KONAK Tunnel and Viaduct, connecting different parts of IZMIR, we met their managers and constructions engineers who gave us all information about the project and showed us the progress of parts under construction. During working days we visited different control stations of SELATINE and KARSIYAKA tunnels, and we enjoyed the weekend of the beauty of CESME and GUMULDUR beaches.

Next week, very interesting for me was the part where we watched all faces of making piles of the bridge construction. Our free time was also very well spent, because: We visited famous places in IZMIR like Clock Tower and Asansor, had a great walk in FOÇA city and watched the antique ruins of EFES.

we started work with highways department. With Contracting company: KOLIN iNŞAAT, we went to their construction site where we saw asphalt plant and we watched workers pouring asphalt, and with ÖZCE iNŞAAT, they showed multifunction asphalt plant (for normal and modified asphalt) and big rock-crusher that produce 4 types of aggregates, and they brought us to tunnel under construction. Every day after working hours they took us to famous tourist destinations like BODRUM, MARMARIS, and PAMMUKALE.

My internship was really special because it was the first time that i spent Ramadan days out of my country, and I think that I'm lucky because I felt the Ramadan spirit of Turkey. For that I thank all of those who made fasting easier for us and especially Mr. ABDULKADIR ORALOĞLU-Director of the second division of Izmir who let us share "Sahour" with him and invited us to a great "Iftar" meal.

In the end of this report, I have to thank for once more all the people I met and made this trip unforgettable for me. Finally I recommend all who will read these notes to visit this "Harika" country to enjoy the variety of nature and the taste of its delicious food and drinks (çay, turk kahvesi, tavuk sis...).

### AMEL MISSAOUI, TUNISIA

#### MY INTERNSHIP IN KGM

My name is Ena Feriz and I am from Bosnia and Herzegovina. This year I have finished Bachelor studies of Civil engineering and in september I am starting to study for Masters Degree in Civil engineering.

I think the only good way for starting this reports is saying thank you to all persons who planned and arranged this year's IAESTE program.

Dear Mr. Ilyas, who was there the whole time for our questions, problems and concerns.

To wonderful Mr. İlhan Kavasoğlu who thought us to play "TAVLA" and taught us some Turkish words.

To Mr. Kamuran Yazıcı who made Sinop visit one of the best ones. And to all of you I didn't mentioned, thanks for your hospitality and everything you have done for this group.

When I started my trip at Sarajevo airport, I had mixed feelings and expectation for what was going to happen in the next six weeks. From the moment I came to KGM's guesthouse and had such a warm welcome all my worries just vanished. My friends were really great, everyone so different, special and unique. My "Abla" is the best  $\Box \Box$ 

First few days spent in Ankara meeting directors, personnel and all I could see in their faces is happiness because eight of us were there.

The trip to the Black sea region was one of the best experiences in my life. Kastamonu, Safranbolu, Amasra, Sinop, Samsun and Amasya with so many historical monuments and beautiful places made me fall in love with them. As I walked the streets of these cities I could almost feel the old Ottoman times, I could taste homemade traditional food, admire the old handcrafted products and I just felt like I have stepped back through time.

After first week and our travel to Black Sea region we started lessons in KGM's center in Ankara. There we were introduced with the structure of the company and departments responsabilities. All of the people we met were really happy to answer all our questions and gave us their contact information so if we need any help we can contact them.

During those lessons I realised why is KGM such a successful company. In my opinion the reason is that every department does a very good job from the design stage to the construction stage of projects, there is a very good communication between departments and everyone of them knows their jurisdiction and acts on it.

Traveling to Izmir meant that in the next 4 weeks we will visit a lot of company's construction sites and introduce ourselves to all the work done there. I was really happy because I will see the way thing are done in the practice and would be able to compare things I know from the books with the way they are done in reality.

During those 4 weeks we visited tunnel, viaduct and highway construction sites, concrete and asphalt plants, laboratories on the sites, we watched night concrete pouring (because of high temperature during the day), asphalt pouring, tunnel and highway control stations.

For me the most interesting was Konak Tunel construction site because tunel and viaduct are two things in civil engineering that interest me the most. I am also very happy that during our training we saw all the steps of making deep foundations for the bridges.

What makes this internship the best is that we have traveled almost the whole shore of Izmir and swam at the most beautiful beaches. Foca, Bodrum and Marmaris are also the cities we went to.

I must mention Mr. Abdülkadir Uraloğlu who with his kindness and hospitality made the first Ramadan without my family a good experience. And for that I am very grateful.

All the time I was thinking how I'm very lucky to be in KGM's internship. There is about one thousand pictures I made, trying to capture every moment of this experience and in this way saved for the future. In the next years when I look at the photos of lunch in Amasya I will remember Mr. Ilyas spelling the water over the table, when I see photos of boat trip in Sinop I'll remember Mr. Ilhan dancing... So these pictures will be eternal memories for my Turkish experience.

I will finish the same way I started. Thank you the best summer of my life.

#### Ena Feriz

## Traineeship at KGM in Turkey

My name is Hemam AbuHamdia. I am from Jordan and I study civil engineering at The University of Jordan. I will obtain my Bachelor Degree in Civil Engineering after finishing my traineeship here in Turkey, the last requirement for my study.

When I was in Jordan, it was hard to me to choose between the internships. But after hearing and reading about Turkey in general and Karayolları Genel Müdürlüğü (KGM) in specific, I decided to choose this internship. It is a good opportunity to have my training in Highway and traffic engineering, transportation engineering and bridges. KGM is very well-known and famous in this field. All of the previous IASETE trainees who had their training in Turkey advised me to come. Also, my family and my friends recommended Turkey for training because of its good culture, people, education, atmosphere, and reputation. Our training was divided into two parts: (1) getting to know Turkey, and (2) practical training. The traineeship started on 25th June in Anakra. At the beginning, we had lessons about the Turkish language and culture. Then, we met the General Director of KGM and heads of the departments.

After that, we made a tour in the black sea region, starting from Kastamonu and to Safranbolu, Amasra, Sinop, Samsun and Amasya. It was an amazing trip, traveling beside the sea, eating traditional Turkish food, meeting new people, swimming in the Black Sea and visiting a lot of mosques, museums and historical places in these cities.

After that beautiful trip, we had some training lessons at the KGM to prepare us for the practical training phase. We also visited The Middle East University in Ankara where we saw different laboratories and met some civil engineering professors.

On the 8th of July, we left to Izmir to start our practical training. The practical training was in two companies that are in charge of projects for the KGM, EGE-ASPHALT and KOLIN İnşaat.

The first two weeks of training were at EGE-ASPHALT. It was about KONAK tunnel project. This project is of 23.8 km long and consists of three main parts; roundabout, bridges and tunnel. Our training was mainly in the tunnel part. It is a double tube tunnel with 1650 meter long for each tube. Each tube is 11 meters width, 3 interior lanes with a total width of 8 meters. The distance between the tube axes is 23 meters.

Most of the Turkish tunnels are designed on the NATM (New Austrian Tunneling Method). KONAK tunnel is one of these tunnels. The construction of tunnel consists of several stages. It starts with soil excavation, soil nailing and retaining. Then, they begin excavating the tunnel tube. After that, they place wire mesh and use shot Crete to glue it. Finally they put interior beams for additional supporting. This procedure is repeated along the length of the tunnel and usually it is done every 2-5 meters depending on the rock and soil condition.

The last two weeks were at KOLIN İnşaat. We learned how bridges, highways and motorways are constructed. First, we noticed that highways mainly consist of four layers; base, sub-base, lower asphalt and upper asphalt layer. Each layer's thickness is defined in the design process. In construction, they start by placing the base layer using the spreading machine then compacting it using rubber compactors and rollers. And this process is done for the whole layers except that there is binder placed between the lower and upper asphalt layers to make them act as one layer. After that, the traffic signals are placed and the borders are marked.

Second, we observed that there are different types of bridges depending on the span length and the material used. In our training we saw the construction of a reinforced concrete bridge. At the beginning they make bore holes to define the type of foundation under the bridge parts. Then depending on the soil profiles and the span of the bridge, the foundation is defined. In the training we saw two types of foundation; pile foundation and single footing. In single footing they pour blinding, place the formwork, and place steel reinforcements. After that they pour concrete through a concrete pump, where the temperature must be less than 32 C, and vibrate the concrete during pouring. It is almost the same procedure in pile foundation except that they construct the piles before placing the footing reinforcement. They dig for piles, insert the mold, place reinforcement, and pour concrete at the end. Also vibration is done here but with different machine.

One of the most important things after constructing tunnels and motorways is the maintenance and monitoring. And this is the case in Turkey. There are a lot of monitoring and maintenance divisions in each city. They do a continuous maintenance and monitor the highways.

Finally, I would like to thank all the people who helped us here in Turkey. Words cannot describe how kind, generous and hospitable the Turkish people are. Turkey is the most beautiful place I have ever been to, from North (Black sea region) to South (Mediterranean Sea region).

So KGM and Turkish people..... teşekkür ederiz Turkey çok güzel !!!

> Yours faithfully Hemam Zakaria AbuHmadia

#### **Training at KGM Report**

To whom it may concern,

My name is Pedro José Zevallos; I am Ecuadorian and currently a Civil Engineer student in my country, having finished the fourth year of career. I am briefly going to explain and describe both my experience during the training in Turkey provided by Karayollari Genel Müdürlüğü, as well as my personal experience regarding the almost two months spend on Turkey working and traveling.

I chose this training because two main important reasons. The first reason for electing to come to Turkey is a personal will to know this nation, it's people and amazing culture. As minor degree student in Art History, I have learned through books and photos the amazing beauty and rich ancient history that this country is proud of. In the same perspective, I did not hesitate when I had the opportunity to apply for this training; essentially moved by my motivation to rediscover and get to know turkey by myself. From a different perspective the program offered by KGM also represented for me a new opportunity to discover a wide range of completely different cultures and people, entirely new for me; in this way a unique opportunity both for the rest of the trainees and me to show our culture and learn from others' too.

The second but not less important reason for choosing KGM's training is related to the huge professional experience opportunity in the highways construction and its interrelated civil engineer fields like tunnel or viaduct constructions. As a civil engineer student I have not yet decided in what field of engineering I want to work, given my interest in highway design and construction this field experience will certainly help me have a good idea of the real work.

The splendid time I spend in Turkey can be divided in two main parts; training in Ankara and practical training at different sites in Izmir. Both of them combined with series of cultural and touristic trips, some times during the afternoon and also on weekends; that accurately complemented our working time during the week. The training started on June 25 in Ankara and during two weeks we stayed in the training center receiving at first an introduction to Turkish History and Turkish language lesson, then we were able to learn about TCK administration and divisions all over Turkey. During the days spent in Ankara for the initial training, we had the opportunity to visit the Middle East Technical University and its remarkable installations. Principally, we were shown the different laboratories (soils mechanics, Asphalt, concrete and materials, structures) where the technicians for each of them showed us procedures and machines for testing materials and also varied researches being carried on.

The training in Ankara continued with several works and capacitation in a series of departments in the General Directorate of Highways (KGM), we were able to attend a variety of interesting lectures provided by the engineers of each department. We had the chance to visit the Department of Road Surveys and Design (Computer Aided Highway Design), Turkish Highways Network and Highway Planning, Construction Department, Maintenance Department, Equipment and Supplies Department, among other. These lectures were not only very complete but also improved my knowledge in particular civil engineer fields, which I am sure that are going to be useful for my professional development.

While being in the first part of the training, we went on a 5 days tour to the Black Sea Region; among the cities that we had the opportunity to visit are Kastamonu, Safranbolu, Amasra, Sinop, Samsun and Amasya. The trip was certainly perfect; we were able to know each city guided by the responsible engineer for each division who was in charge of each city's surroundings. In each city we went to many beautiful historical places as well as touristic places. I was surprised of the splendor in the Black Sea Region and the kindness of their people that received us impossibly better.

After the days in Ankara we left for the practical training in Izmir. Izmir is the third biggest city of Turkey, and because of that it has lots of projects inside the city as well as in its surroundings. The whole month that we were at Izmir, we were part of the Karayolları 2. Bolge Müdürlüğü and because of that we visited different projects controlled by the division. We were able to learn profoundly especially at one big project being constructed in the city; the Konak Tunnel. By working at the Konak Tunnel construction site for several days we were able to acquire new knowledge about tunnel construction methods and specially NATM that is being used for this tunnel particularly, as well as foundations and pile construction for the viaduct constructed for the tunnel. This project was controlled by TCK but constructed by two main companies; EGE Asphalt and Kolin insaat. We met

the engineers working in these companies as well as the company's laboratories and procedures. Also we were able to visit other projects that these two companies are now constructing, especially highways. We visited the EGE Asphalt plant for aggregates and asphalt production that served the Izmir-Aydin Highway construction, were we had the opportunity to learn about the whole process for asphalt production and controlling.

Throughout the month spent in Izmir we visited during the weekends touristic places as the Gümüldür and Cesme sea sides, as well as archeological places like Efes among others. This program made by the division's chief engineers included very beautiful places like Marmaris and Bodrum as well. We had the luck to travel to many stunning cities, enjoy their beaches and get to know them; while visiting at the same time highways projects.

To conclude, I am really thankful for having the opportunity to be part of this program at KGM; not only because it surpassed my expectations but because it was a very enriching for my future carrier. Getting to know Turkey during my time spent at Ankara, Black Sea Region, Izmir and its surroundings (The Mediterranean environs); made me realize what every people that have come to Turkey told me before coming, that Turkey is for sure one of the most beautiful countries in the world. I not only recommend other civil engineers students to apply to the KGM wide-ranging great program, but I certainly advise everyone to visit Turkey. This incredibly beautiful country is the owner of a magnificent cultural blending that makes today a marvelous and constant developing country integrated by very generous people always willing to work towards progress and development of Turkey.

Sincerely yours, Pedro J. Zevallos Turriaga

### TRAINEESHIP AT THE KGM IN TURKEY

My name is Rafal Gluszko. I am from Poland and I study civil engineering at Rzeszow University of Technology. I have finished fourth year in my University.

I chose this traineeship because my friends Krystian, Ewa, Anita and Grzegorz recommended me this practise. They said that Turkey is a very beautiful country and also I can learn a lot about road construction, bridges, tunnels, management, etc... I am especially interested in tunnel construction that's why traineeship in General Direction of Highway was the best choice for me.

We started traineeship on 24th June in Ankara. We went to the training center and we had a lessons about turkish language, history, culture and the most interesting places.

In the first week we visited beautiful places and cities like Safranbolu, Kastamonu, Sinop, Samsun, Amasya, etc... We had a lot of fun and we met a lot of nice people - turkish people are extremly friendly. Black Sea Region is amazing and really interesting place.

In the second week we visited Ankara University to see the mains parts of their work like laboratory's and road's tests (Casagrande, CBR, Proctor etc).

After two weeks we went to Izmir 2nd Division of KGM to start our traineeship on sites. The firsts days we met all the main managers of the project and they every day gave us lectures on a different topic of their project, after which we would be taken to construction to see what we had learned about. We visited different construction sites and have seen incredible structures for example tunnels, highways, motorway, brigdes.

We were working in EGE Asphalt on the project: Konak Tunnel. We visited the Karsiyaka Tunnel and Selatin Tunnel survey center where we saw the whole monitoring. We have seen building a road surface, drilling and concreting pile foundations, shotcrete on slopes and we learnt about construction's machinery.

We were working in Kolin Isaat. They showed us Asphalt plant and all process of producing asphalt. We also received practical training in the laboratory (eg. asphalt test).

After work we had a lot of fun because we visited the beautiful historical and tourist places like Efes, Bodrum, Milas, Pammukale. At the weekends usually we spent our free time on the beach in Gumuldur, Cesme and Marmaris.

## 30th,July,2012

Overall the TCK program was very well prepared and I think that Turkey is an extremely good place to come for practical training and experience.

I was enjoying these days that we have passed here and I really like this country. Turkey is amazing and wonderful place, people are very kind and helpful. We have learned about interesting things of civil construction, we have met a lot of people and had funny with all of them. I would like to visit again this beautiful country and I wish I could meet all the people that I have met here.

### Rafal

My name is Rami Ben Dababis. I am a civil engineering student at the National School of Engineering of Tunis. I chose this internship with the General Directorate of Highways in Turkey for so many reasons. First of all, I am so interested in highways and transportation engineering and an internship in a company as big as KGM would certainly improve my knowledge in this field. Moreover, Turkey is a beautiful country. In fact, the interesting experience of some friends of mine here really encouraged me to make this choice. Finally, this traineeship would offer me the chance to meet people from all walks of life, live with them, learn from them and to discover the beauty of Turkey with them.

The first two weeks of this internship were devoted to an orientation program. At First, we attended some lessons in the training center of KGM. We learned about the Anatolian civilization, the modern Turkish republic and the reforms of Atatürk. We also had the opportunity to learn the basics of Turkish which helped us to communicate easier with the people of this beautiful country. Furthermore, we had a lot of meetings with the directors of KGM. It was especially a pleasure to meet M. Mehmet Cahit Turhan, CEO of the General Directorate of Turkish Highways.

On Thursday, the 27th of June we left Ankara for a four-day trip in the Black Sea region with the company of M. Kamuran Yazıcı, head of the department of Program and Monitoring in KGM and M. Ilhan Kavasoğlu, director of the division of Training and Evaluation. We spent two nights in Kastamunu and the other two nights in Sinop. We first travelled to Safranbulu. It was a little town with an old style and beautiful traditional houses. Then, we had lunch in a lovely restaurant in Amasra where we had the opportunity to taste and eat traditional Turkish meals. The next day, we visited the Byzantine castle of Kastamunu and after lunch we left to Sinop, one of the most beautiful natural harbors of the Black Sea. We had a meeting with the governor there. A day later, we visited the Archeology Museum of Sinop. In the afternoon we went to the beach. On Sunday, we moved to Samsun where we visited the Atatürk museum. Before leaving we had been to Amasya, a wonderful town lying on a tight mountain valley.

During the second week, we had to prepare for the practical training. As a matter of fact, the lessons that we had attended gave us an idea about the different responsibilities and hierarchical positions within KGM. We also visited the Middle East University of Ankara where we met PhD students. They talked to us about their researches and showed us some experiments they were conducting in the laboratories. To know more about Ankara, we were invited to visit the Citadel and Anıtkabir (The Mausoleum of Atatürk). On the last day of the orientation program, we travelled to Beypazarı where we spent the whole day enjoying the beauty of its traditional houses and natural landscapes.

On Sunday, the 8th of July we left to Izmir for the practical training. On the first day, we met M. Abdulkadir Oraloğlu, director of the second division of Izmir. Then, we attended a presentation made by EGE Asfalt engineers about the project led by the company which is a tunnel between Konak and Yeşildere. We stayed in the Konak construction site for two weeks and we learned a lot about tunnels and structural construction. We also visited control centers of Karşıyaka and Selatin tunnels. I appreciated the advanced monitoring system used in these stations in order to ensure the safety of the road tunnel users. Later, we moved to the road construction department. We visited a lot of construction sites. We also had the opportunity to see the different steps of pile foundations execution. The engineers of KGM, EGE Asfalt and KOLİN İnşaat were really helpful. They were always ready to provide us with useful information and answer our countless questions. What's more, since we had free days on our schedule, we were able to visit a lot of wonderful places and enjoy the charm of the Aegean region. We had been to Çeşme, Foça, Bodrum, Marmaris and Pamukkale. We

also visited some historical and archeological sites like the Celsus Library in Efesus, the Gymnasium of Sardis and the temple of Zeus in Euromos.

These days that I spent in Turkey are unforgettable. It was not only a successful practical experience with a big company but also a chance for me to discover the beauty of Turkey. I will certainly recommend this internship for next year's exchange. Finally, I would like to thank everyone who helped to make such a comprehensive program and especially M. İlyas Kambalı, the manager of the IAESTE Program in KGM, for his support and his patience.

Rami

### **Report of my IAESTE internship at the KGM in Turkey (summer 2012)**

Orientation program (Ankara & Black Sea Region)

An internship in Turkey was something I wanted to do from the very beginning of this academy year. However I didn't apply for the first form in the IAESTE program. Luckily this internship in Turkey was one of the leftovers in Belgium, so in the end I was able to apply for this internship. From the moment that I've arrived in Ankara, I had the feeling that this was going to be an extraordinary experience. Everyone was really kind from the very beginning; we were well conceived. In the first days of the orientation program we get to know TCK the company and its different departments. We met a lot of important and nice people such as Mr. Mehmet Cahit Turhan (the General Director of KGM), Mr. Kamuran Yazici (Director of the Program and Monitoring department), Mr. Ilhan Kavasoglu (Director of the Training Centre), etc.

Although I'm originally from Turkey, I didn't get the chance to visit a lot of places in Turkey. So I was really glad that we visited the Black Sea Region. We visited a lot of places such as Kastamonu, Amasra, Safranbolu, Sinop, Samsun and Amasya. During this trip Mr. Ilhan was with us, so we get to know him better; he has a really funny and nice personality. In Sinop we met the governor of the city Dr. Ahmet Cengiz; he had arranged a nice touring program in Sinop. On the way back to Ankara, we visited Amasya (but not long enough). In Amasya we were guided well, in a short amount of time, by Mr. Hüseyin Yavuz Aktürk. In my opinion Sinop and Amasya were wonderful; you just have to visit these cities. After seeing Amasya's river, castle, mosques and charm, I will certainly visit this place again. In our last days in Ankara we had some lessons about TCK and its different divisions. We also visited the famous Middle East University for Civil Engineering in Ankara; it was interesting to learn more about the education system and methods in this university and Turkey in general.

During these two weeks Mr. Ilyas Kambali was responsible for us. Without him we would've been lost. He guided us through everything. He was always there to solve our problems. His funny personality was a nice addition throughout the whole orientation program.

Training part 1: week 1&2 (Izmir)

The first part of the training consisted mainly of the Konak Tunnel in Izmir; a really impressive and big project. Mr. Cetin Inan (the chief engineer), Mr. Müjdat Ciçek (the control chef) and the project manager of the contractor firm Ege Asfalt explained the details of the project. Because of a soil displacement of 4cm the works at the Konak tunnel were temporarily delayed.

Next to the technical stuff they arranged a program to visit the most famous places in Izmir and around Izmir. In the first week we visited Cesme, Alaçati and Gümüldür. The beach, the sun and the view were great but the temperatures were too high; sun burning was inevitable, but it was worth it.

During week 1 we also visited the control centers of the Karsikaya and Selatin Tunnels. It was really interesting to find out that these control rooms were high-tech; a lot of modern technology is used to maintain the safety and the traffic flow in these tunnels. In the second week we came in contact with the company Kolin Insaat, they are in charge for the making of the North Motorway in Izmir. On the construction site of Kolin we had the opportunity to see their asphalt plant (imported from The Netherlands). We also saw all stages in making a viaduct.

At the end of this week we visited the charming city Foça with its beautiful sea-sight, Ephesus with its authentic remnants from the Roman Empire and Sirince known for its wine. In summary the first two weeks were a great combination of touristic and technical activities.

### Training part 2: week 3&4 (Izmir)

The second part of our training started again with Kolin, but this time we get to see the pouring of the asphalt concrete pavement of the Menemen-Manisa road (with a temperature of minimum 120°C). Next, we visited an asphalt plant belonging to özce asphalt (controlled by TCK); the asphalt produced in this plant is used for several projects. In the third week we also visited Bodrum and Marmaris, during these trips the most atmospheric moment was the dinner next to the sea in Bodrum. Our last stop was in Denizli, Pamukkale.

## Conclusion

My expectations of this internship are certainly fulfilled. Thanks to this Internship I have a better knowledge of Highways and technical methods used in Turkey. I get to see a lot of beautiful places in Turkey that I had never seen before. In these six weeks I get to know a great company, a lot of nice people and the beauties of Turkey. In short this internship was a great experience.

The possibility that I shall start my future career in Turkey is now much higher. In conclusion I want to thank everyone who was responsible for this great experience.

# Suat Malçikan