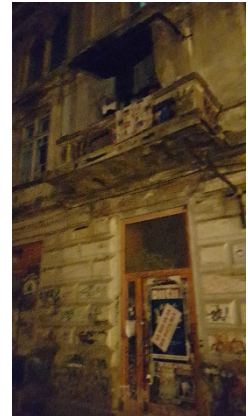
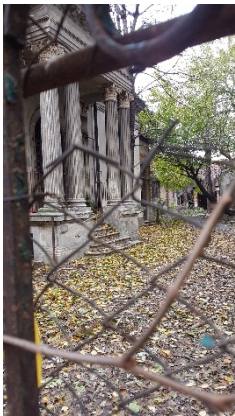


STUDENT REPORT
BUCHAREST – ROMANIA

NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT IN MICROTECHNOLOGIES
– IMT BUCHAREST
WS 16/17
DEPARTMENT OF APPLIED SCIENCES AND MECHATRONICS
MASTERS COURSE MICRO- AND NANOTECHNOLOGY



1. APPLICATION PROCESS

The main task of my master's thesis: "Selective Ultrasonic Fusion: Acoustic Simulations and Physical Evaluation of Powder Materials" was to investigate the additive manufacturing process concept Selective Ultrasonic Fusion, which was conceived roughly at the same time by my supervisor, Dr. Gabriel Moagăr-Poladian and myself. This coincidence has been revealed during our respective patent application processes, which made the contact possible. The gesture of accepting the considerable effort to evolve this contact into a collaboration and mentorship has been received with great appreciation from both sides.

To harvest the exceptional potentials of the process concept, a collaboration between the University of Applied Sciences Munich and the Institute for Research and Development in Microtechnologies – IMT Bucharest has been established. It is not only valuable for this project, but also a perfectly fitting resource for the Master's Course Micro- and Nanotechnology at HM.

For the time of my thesis, I was hired as a research assistant, the application process followed standard procedure. No online processing was available - everything went to my supervisor's desk. A weekend trip to Bucharest, one semester prior to my thesis, allowed a personal meeting and tour through the Institute, as well as a tour through the city.

2. EVALUATION OF THE INTERNSHIP

Training and research was accommodated very well. As I was hired as a research assistant, my supervisor set out to treat me as a colleague, not a student. This worked well for me, I had freedom to research and work on topics of my own choosing.

The timeframe was set after my prior visit. It was established partly by my semester requirements, partly by myself and partly by my supervisor. The timeframe received a few alterations due to unpredictable budgetary problems, which did not reduce the accuracy with which it was worked through.

I was treated with respect, not only by my supervisor but by all staff members. The ones I got to know closer were very friendly and caring. Regular meetings and office gatherings on occasions such as birthdays and name days were very good for the intercommunication between staff members.

3. TRAVEL

At the time of writing, planes from Munich to Bucharest were available for around 100 €. The flight itself takes two hours. OTP Airport is about half an hour north of the city, by taxi, for about 7 €, which is by far the best way to travel Bucharest, as the buses have a time table which is only suitable for a sort of short-time entertainment during the wait for the next bus.

There are cheap Dacia cabs that offer no neck support or safety belts in the back seats. They are almost always trashed, have broken windshields and smell horrible. The drivers are the same as they are all over the world, some nice, some not. There is smoking, constant phone conversations and music. Multiple gadgets cover every inch of the dials and ears of the car and driver, respectively. For some, this would seem to be a terrible experience, for me it was always worth the risk of dying in a horrible high speed crash, conjured from the general Romanian driving style and the abundance of deadly potholes in every street and sidewalk.

There are also slightly more expensive cabs, mostly small French limousines, and very expensive cabs (in comparison), the "black" cabs. I never tried any of them, as I am by far not fancy enough for that. I was told, the stories online about the taxi mafia may have some hold in the south and south east of Bucharest.

Bucharest has a very good underground system. The timing is a lot better than the one of the busses, though some of the stations are very confusing. All public transport is incredibly inexpensive.

Riding a bicycle in Romania is generally considered ill-advised, only poor people and kids are rumored to do it. And of course the odd commuter/randonneur/fixie – rider.

4. ACCOMMODATION

I found my flat through various groups on Facebook. I was very lucky as my flat was very close to the center, near the Intercontinental hotel. Luck also brought me a very nice roommate and a very lovely neighborhood. Stunning villas from the incredible thirties, some of them are renovated, but the run-down, abandoned, boarded up and over-grown are more interesting anyway. My rent was 350 €, it is possible to get rooms for 200 € and less if you are flexible. I had a lovely balcony, not too useful in the winter but it offered a perfect view. My room was fully furnished with its own little library of Romanian, German, American, etc. authors. Safety features like triple locks and keycard entries are common in Bucharest, a lot of places are also guarded 24/7.

5. LEISURE

The old city around "Lipscani" has more pubs than necessary. All traits and characteristics are available, from horrible to cheesy, pleasant to riveting. Fancy and messy clubs are everywhere in Bucharest, the main one for students seems to be "Control".

Following these nights, some of the aforementioned villas were turned into fashionable trend-centers. Cappuccino should be everybody's drug of choice. "Dianeii4" was very close to my flat, a fact I abused often.

If you get to know the right people, there are truly amazing abandoned places to visit in Bucharest. Every street of this city has at least one abandoned building, due to a mixture of fear of earthquakes and bad investor behavior. Some are available to the public, most are not. All of them are protected by the overabundant private security forces, which come in all colors and under the funniest names: RPG, SWAT, FIRE. On the outskirts, there are lost factories, barracks, and military grounds. I will come back to extend my knowledge of these places.

There are lots of places to visit outside of Bucharest: Braşov, Constanţa, Timişoara and so on. I did not have the time or motivation yet.

6. INTEGRATION

Being the first master's student from abroad at IMT, in fact, the first master's student period, makes the fact, that everything worked out smoothly, like it did, very admirable. There are a few Ph.D. positions, but most of the staff is very far from their student years. Nonetheless, most of them speak English, a surprising amount speak German. Every one of them was open to discuss their work and interested in mine.

7. CONCLUSION

Personal recommendations should be told in person, at least via mail. If you are interested in a city that has Europe-like characteristics with a twist of insanity, you should visit Bucharest.