

# Miguel Palacios

## REQUISITES

Table + Box symbolizing the experiment  
Blankets  
Cardboard with "Transition" on it  
2 pairs of dark sunglasses

## ACTORS

Narrator: **Frank**  
Miguel: **Elisabet /Luuk**  
Jos: **Olaf**  
Frank: **Frank**  
Kinga: **Kinga**  
Raoul: **Raoul**  
Lisette: **Sofia**  
Rienk: **Rienk**  
Vladimir: **Maxime**  
Janne: **Janne**  
Quizmaster: **Luuk + Frank**  
Bas: **Bas**  
Herbert: **Herbert**  
Ivo: **Kate**

## MUSIC

**Danielis**

## How a Spanish macho became a Dutchman

### SCENE 1

Intro-Music: Some Flamenco, very powerful – dance music.

#### Narrator

On one day in the teletubby-land, I mean in **Valladolid**, in northern part of Spain, a brave physics student, Miguel Palacios, decides to explore a little bit of the world and new cultures. Together with physics, he started studying history, mainly of the **17<sup>th</sup>** century. Something strikes his eyes: *Spain owns Holland!!!*. The rest of the book becomes irrelevant and Miquel is ready to go!

#### **Eli/Daniel**

#### **Rap Spanish dialogue and/or rap**

**Girls, background:**

Chanting: **GUAPO, GUAPO!!!**

**Miguel (to himself):** A HOLLANDIA, THE COUNTRY OF THE GUIRIS.  
HERE, I START.

**Narrator:** So, Miguel lands to the infamous biophysics group of Amsterdam. Instead of 'pure' physics there was also 'a bit' chemistry to be learned. I must say. Miguel's English was not the strongest one. But he knew important words.... thank.... you...

*Janne & Frank are standing and chatting, Miguel comes in.*

**Miguel (strong accent):** Thank you, I mean, good morning. My name is Miguel and I am the new exchange-student here in your group. Dr. van Amerongen gave me a task to measure a protein complex called LHCII could you help me a little bit?

**Janne & Frank:** Sure, why not.

**Miguel:** Thank you.

**Janne:** Nothing to thank.

**Miguel:** Thank you.

**Janne:** I said, nothing to thank. Just do 0.1 M Bis-Tris-buffer with 0.03% b-DM, and add about 60% glycerol. Then we start, Frank will show you how the setup works.

**Frank:** Yup, see you later. *(and goes away)*.

**Miguel:** Thank you. eehhmmm, but what...eehh...one molar...

**Janne (looks up):** Again these physicists. Ok, let's say, so you decide to make a 100 ml buffer.....

**Miguel:** Ok. Thank you.

**Janne:** don't thank. So, then you weight 245.3 mg Bis-Tris powder and dilute it in water....

**Miguel:** Thank you.

**Janne:** ...check the pH with the meter.....

**Miguel:** Ok. Thank you.

**Janne:** .....and later you add the b-DM from 10% stock solution and add needed glycerol...

**Miguel:** Ok. Thank you.

**Janne:** Miguel, don't thank! There is nothing to thank.

**Miguel:** All right. Thank you.

**Janne:** Now Miguel, listen, you won't get anywhere here in Holland if you are polite and keep on thanking all the time.

**Miguel:** All right. Thank you.

**Janne:** MIGUEL!!!

**Narrator:** Miguel has learned how to prepare the buffer, now is the time to start measuring!  
(*Frank appears, Miguel goes to him*)

**Frank:** You now have your sample in the glycerol buffer. Now you need to fill a cryostat.

**Miguel:** If you say so...

**Frank:** First you pump the cryostat...

**Miguel:** ok, thank you

**Frank:** ...then you flush the cryostat with dry nitrogen...

**Miguel:** ok, thank you

**Frank:** ...then you fill the cryostat with liquid nitrogen...

**Miguel:** ok, thank you

**Frank:** ...then you fill the cryostat with liquid helium...

**Miguel:** ok, thank you

**Frank:** So, what did I tell you?

**Miguel:** ok, thank you

**Frank:** WHAT!? NO!!! I taught you to fill the cryostat. I assume that now you can do it yourself!!!

**Miguel:** Oh yes yes, Frank, of course Frank, thank you very much for your instructions.

*Miguel is trying to fill a cryostat and hassles with the setup*

**Miguel:** Hmmm Frank, can you help me filling this cryostat? ...And...eehh.. how did the sample go in? Oh, is the laser now on? How do I get the beam to the sample?....

**Frank:** Now Miguel, listen, you will not get your PhD within 4 years when you keep on asking for my help all the time. You do know how to fill these cryostats. I am not going to tell you again. And by the way, not saying thank you will also save you a lot of time.

**Miguel:** Yeah, I do want to get my degree within 4 years. I will try myself this time...

**Narrator:** So, Miguel learned to do experiments himself. He is collecting data and later fitting the results!!!

## SCENE 2

**Narrator:** So, Miguel decides to concentrate on, instead of English, Dutch language and the local culture.

\*\*\*\* *Changing of the person/ Miguel becomes dutch* \*\*\*\*

His name starts being pronounced in a "dutch" way (ggggggg)

*With a big flash and bang the actors exchange – song of Transition: Luuk replaces Cosimo as Miguel, while someone passes by with a big cardboard sign (with Luuk behind it), which says: - "ps Transition State"; First "Miguel" leaves with cardboard -*

**Narrator:** Miguel managed to master the elegant Dutch language and started speaking Dutch to everyone.

**Miguel:** Goeiemorgen Jos! Heb je de laser voor mij al aangezet? En het licht uitgedaan?!? En heb je de stapel zwarte dekens voor mij gevonden?

*(Did you switch on the laser? And turned off the lights? And found black blankets for me?)*

**Jos:** yes Miguel, I did switch on the laser, and the lights are off! And here are all the blankets! Make sure you don't get any dust on the optics!

**Miguel:** Natuurlijk niet! *(Miguel starts covering up the setup)*  
*(of course not)*

**Frank** *(enters the scene):* But Miguel, why are you covering the CCD-setup???? It is already in a black box!

**Miguel:** Ja, maar het licht komt echt OVERAL vandaan! Licht uit alsjeblieft!  
*(Yes but light comes from everywhere! Turn it off)*

**Frank:** Miguel, I think you need some fresh air....

**Miguel:** Ja hoor... Wij moeten iets typisch nederlands doen... een fietstocht of zoiets? Ik heb een nieuwe hollands racefiets gekocht! Zullen wij een rondje holland fietsen?  
*(We should do some real dutch sport, how about biking tour? I have just bought a nice dutch racing bike! Let's bike around Holland?)*

**Frank:** Sure, why not. I know a nice route. It's about 127.5 km long, perfect, with average speed of 27.3 km/h. Just finish your measurements and then we go.

*(Miguel puts sunglasses on)*

**Kinga** *(enters the room, switches on the light)*

**Miguel:** Licht uit!!!

**Kinga:** What are you saying???

**Miguel:** "Licht uit" means Lights off! You are in Holland now not in Polland, you have to speak Dutch!

*(Both put on sunglasses)*

**Kinga:** But we don't speak Dutch in Polland! How can you see ANYTHING in this darkness???

**Miguel:** I need it donker! Kijk at my nice measurements here on the screen!

**Kinga:** Where is you screen then??

**Miguel:** Kijk hier! Ooooooh, Noooooooo!!! I just cancelled all my data!

**Kinga:** Oh, don't worry, just repeat the measurement, it happens me all the time!

### SCENE 3

**Narrator:** After mastering almost all aspects, hooks and tricks of the chemical and steady-state LAB Miguel got an important task: to measure STARK on LHCII.

**Miguel:** Ik heb een fantastisch idee. Dit is wat het hart van een natuurkundige gelukkig maakt- het Stark effect!! Dit is echt spannend. Maar hoe werkt het eigenlijk?

*(I have a great idea. This is what should make physicist heart happy- the Stark effect! It's definitely exciting. But how does it work?)*

*Miguel goes to Herbert:*

**Miguel:** Hoi Herbert, Ik wil graag het Stark effect meten. Kan jij me even helpen? Ik heb geen idee hoe deze set-up werkt!

*(Hi Herbert, I'd like to measure Stark. Could you help me? I have no idea how this set-up works)*

**Herbert:** Eeehm, well, Miguel- it's a splendid, splendid idea. I'm so happy to have such a creative PhD student. Look, there is this guy Bas. Why don't you ask him?

He has been in our group from the very beginning, so he knows everything about it! I would be more than happy to help you, but I'm kind of busy ~~with this enormous work of excitons, the book you know.~~

**Miguel:** Ok dan. *(ok then)*

*Goes to Bas:*

**Miguel:** Hoi meneer Bas, Ik ben Miguel; De nieuwe spaanse AIO van Herbert. Weet jij iets over de Stark set-up? Ik heb daar een klein probleempje... Ik zou zo graag jouw hulp hebben daarmee a.u.b...

*(Hello Bas, I'm Miguel. I'm Herbert's new Spanish phd student. Do you know anything about the Stark set-up. I have a small problem with it. I would really appreciate your help, please...)*

**Bas(to himself):** Miguel, Spanish? Shit! Now I will never impress any female-student again. How could one find a decent girlfriend here with all this Southern competition around?

*(To Miguel):* Look here, I am a busy man, you see? I have my social life to repair, not mentioning finding the right font for my thesis. I'm not really into helping people right now. First I have to help myself. But I know the specialist, someone who is perfectly familiar with the technique: *(he shouts)* Raoul, Raoul!

**Raoul:** Hey man, what's up?

**Bas:** This is our new AIO, Miguel. He wants to learn Stark. *(Bas goes away)*

**Raoul:** Hi Miguel, I'm Raoul, I guess you have read about me already. You are a new student, he? Wanna learn Stark? Stick to me and everything will be just fine. We will

publish many beautiful papers. *(they walk to the steady-lab)* So you see- it's a Stark set-up. Such a beauty!!! I pretty much created it myself. Without me it wouldn't work at all. Here you have bunch of lock-ins, a monochromator and so on *(he turns few knobs)*. Hey, don't forget the sample and let me know when you have the results!  
*(he leaves, talking to himself)*: Life is so beautiful and I'm so good with students. I really should become the group leader in some big LAB soon.

**Miguel:** Wow, die Nederlanders zijn zo assertief. Het lijkt erop dat ik het allemaal maar zelf moet leren. Het kan niet te moeilijk zijn...Spanje heeft Nederland tenslotte al eens eerder veroverd. Stelletje sukkels.

*(Wow, these Dutch are so assertive. It seems like I have to learn it all by myself. It shouldn't be that difficult. After all, Spain conquered Holland once before.*

*He struggles with knobs, trying to get a signal etc; and exhausted fall asleep on the desk.*

## SCENE 4A

**Miguel:** Ha, lekker, eindelijk donker en de opstelling werkt... maar waar is dat lekkere wij...., ik bedoel, die studente toch.... Lisette, of wat was haar naam ook al weer?

*(So, finally darkness and a well-functioning setup...but where is this student...Lisette or what was her name...)*

*(Lisette is surrounded by male-colleagues, and finally gets on stage)*

**Miguel:** Eindelijk, je bent er. Oke, vandaag zullen we een pump-probe experiment met LHCII doen. Ten eerste, hebben we duisternis nodig!! *(Sunglasses on)*

*(Finally you're here. So, today we make pump-probe experiments with LHCII. First of all, we need darkness!)*

**Lisette:** Aha *(Sunglasses on)*

**Miguel:** *(gets excited on the experiment, not on Lisette. Other guys are "hi'ing" all the time):* Dus, die spiegel daar zodat de straal zo loopt, en dan.... Even kijken naar de compressie.... En dan moet het sample daar, en...

*(So, you place that mirror so that the beam goes there....etc. and then you put the sample here...and.....)*

**Miguel** *(even more excited):* Dus, nu gaan we de hele opstelling bedekken, en kunnen we beginnen met data verzamelen!!!!

*(So, now we just cover the whole setup and then we start collecting data!!)*

*Miguel by chance covers her also in black linen, Bas passes by, uncovers her and takes her with him.*

**Miguel** *(VERY excited):* Schitterende data!!! Fantastisch!! Kijk Lisette.... Lisette? *(Miguel looks around)*

*(Beautiful data!!!! Brilliant, Look Lisette Lisette? ...Lisette...?)*

*But then keeps on looking at the data*

**Miguel:** Let maar niet op die studentes, ik ga deze resultaten met geswinde spoed aan mijn baas laten zien. (*Nevermind these female students, I will just go and show these results to my Boss*). (*passes some papers to Rienk*)

## SCENE 4B

### Encounter with Rienk

**Rienk:** Very nice, Miguel! Let's send it to Siberia, for some slightly educated modeling.

**Vladimir**(*Russian accent*): Hello Rienk, this problem is interesting, it is indeed interesting. But there is a problem. This data is not good enough! My always PERFECT model is much better!

**Rienk:** Look Miguel! The data must coincide with the model! Put the chlorophylls back to the bag and measure again!!

**Narrator:** Patiently Miguel returns into the lab. After 2 more months in the lab....  
(*Miguel returns to the lab and starts measuring, and finally falls asleep!*)

**Narrator:** Having finally succeeded in MATCHING the data with the model, he writes his papers and goes to his "REAL" supervisor.

**Miguel:** Hoi Herbert, hier zijn mijn artikelen. Zou jij je je deskundige oog hier op kunnen laten vallen?  
(*Here are my papers; could you look at them with your expert eye?*)

**Herbert:** Just a moment, I am now moving to Wageningen. But, just send them there! In the mean time ask Ivo to help you with the data-analysis!

(*Ivo comes on stage, running around, being very busy*)

**Miguel:** Ivo, zou je me kunnen assisteren met het fitten van mijn data?  
(*Could you assist me with some data-fitting?*)

**Ivo:** Sorry Miguel, I don't have time, but send me an e-mail and express your problem. I'll check when I have more time.....

(*Ivo goes away*)

**Narrator:** So, Miguel is on his own. Patiently he comes and goes every day to his office, sits at his computer, fits the data, changes in the meanwhile windows environment to Linux, solves many puzzels, writes papers... and on one day:

**Miguel:** Eindelijk mijn proefschrift is klaar!!! Herbert kom even zien...

*(Finally the Book is ready. Herbert, could you take a look...)*  
*(Miguel holds a bunch of papers...)*

**Herbert** (*puzzling*): eeheh, Miguel thanks, thats good, but look I have this new collaboration (*winks his eye*) so I am a bit busy these days..... I'll try to check it next week.....

**Narrator:** And the 'next week' came. No matter how busy other people were. Miguel knows dutch from A to Z, rebuilds schools and roads somewhere in the South-America, and most importantly, gets his degree!..... However, there is still something to be done....

## SCENE 5

Final exam:

**Narrator:** To definitively acquire the dutch nationality, Miguel goes to the 'advanced inburgeringscursus', where he has to do a final exam:

*(the real Miguel is taken on stage)*

**Quizmaster:** Welcome everyone on the final test. Miguel, To become a true Dutchman. Your task is to translate the some elementary questions in dutch and to answer to them. When you get 3 questions right, you have passed the exam.

1st: Are Oliebollen hydrophobic or hydrophilic, and how do you proof it?

2nd: Name three dutch nobel price winners.

(van der Hoff, Zeeman, Kamerling Onnes, Koopman, Gerard't Hooft, van der Waals, Loorenz)

3rd: What is Beatrix's birthday?

4th: What is the name of the delicious traditional soup they sometimes serve in the canteen?  
Snert natuurlijk

5th: What's inside a kroquette?  
(nobody knows)

6th: Give the name of the dutch national anthem.  
(Het Wilhemus)

7th: What are the 3 colours in the dutch flag, and in which order?  
(Red, white, blue)

8th: When was Pim Fortyn killed? (6.5/5.6/4.7)

9th: When is the Queens day?

10th: Sing the first vers of the national hymn.

11th: name two famous dutch actors!  
(Brigitte Schuurman, en Antonie Kamerling)

12th: what is the name of the prince's wife?  
(Maxima! En haar dochter heet Amalia)

**Quizmaster:** Okay, okay, 3 questions RIGHT, cut it! You ARE officially dutch now. You now are a DUTCH DOCTOR!! Congratulations!

Ends with the song, THE PORT OF AMSTERDAM: David Bowie version