



UNION OF ENGINEERS AND TEXTILE  
TECHNICIANS OF SERBIA

EDITOR:  
SNEŽANA UROŠEVIĆ

VI INTERNATIONAL SCIENTIFIC CONFERENCE  
CONTEMPORARY TRENDS AND INNOVATIONS  
IN THE TEXTILE INDUSTRY

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**CONTEMPORARY TRENDS  
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TEXTILE INDUSTRY**

VI MEĐUNARODNA NAUČNA KONFERENCIJA  
**SAVREMENI TRENDOVI I  
INOVACIJE U TEKSTILNOJ  
INDUSTRIJI**

**PROCEEDINGS**

EDITOR:  
Prof. dr SNEŽANA UROŠEVIĆ

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Belgrade, 14-15th September, 2023  
Union of Engineers and Technicians of Serbia  
Dom inženjera „Nikola Tesla“



**UNION OF ENGINEERS AND TEXTILE TECHNICIANS  
OF SERBIA**

**AND**

**UNION OF ENGINEERS AND TECHNICIANS OF SERBIA  
FACULTY OF TECHNOLOGY AND METALLURGY IN BELGRADE  
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SOCIETY FOR ROBOTICS OF BOSNIA I HERZEGOVINA  
BASTE - BALKAN SOCIETY OF TEXTILE ENGINEERING, GREECE**

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Home of Engineers „Nikola Tesla“**



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**UNION OF ENGINEERS AND TEXTILE TECHNICIANS OF SERBIA**

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**“CONTEMPORARY TRENDS AND INNOVATIONS IN THE TEXTILE  
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**PROCEEDINGS**

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## **PREFACE**

The 6 th International conference "Contemporary Trends and Innovations in the Textile Industry" CT&ITI 2023, is co-organized by the Union of Engineers and Textile Technicians of Serbia, the Union of Engineers and Technicians of Serbia, the Faculty of Technology and Metallurgy in Belgrade, the University of Faculty of Technology, Shtip, North of Macedonia, Society for Robotics of Bosnia i Hercegovina and Balkan Society Of Textile Engineering-BASTE of Greece.

The Ministry of Science, Technological Development and Innovation of the Republic of Serbia of the Republic of Serbia recognized the importance of this Conference, and thus, supported it.

The aim of this Conference is to consider current technical, technological, economic, ecological, R&D, legal and other issues related to the textile industry, then the application of contemporary achievements and the introduction of technical and technological innovations in the production process of fiber, textile, clothing and technical textile by applying scientific solutions in order to improve the business and increase the competitive advantages of the textile industry on the domestic and global market.

Leading scientists and experts from the Balkans and other countries, working at faculties, textile colleges and institutes, but also individuals who professionally deal with the issues at hand are taking part in this Conference.

The Conference program involves papers dedicated to the scientific and practical aspects of the following topics: Textile and Textile Technology, Textile Design, Management and Marketing in the Textile Industry and Ecology and Sustainable Development in the Textile Industry. The Conference program includes 54 papers, and a total of 132 participants from 16 countries: Albania, Bosnia and Hercegovina, Bulgaria, Croatia, Germany, Greece, India, Latvia, North of Macedonia, Portugal, Russia, Serbia, Spain, Slovenia, Turkey and Ukraina.

Therefore, this Conference is an opportunity for establishing scientific, educational and economic cooperation of our country with other countries. Certain number of papers by domestic authors present the project results dealing with fundamental research and technological development, financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

I would like to thank all those who have made it possible to organize the conference Contemporary Trends and Innovations in the Textile Industry and make it a success. First, I would like to thank the Scientific and Organizing Committee for working hard, spending countless hours and finding the best solutions for numerous organizational aspects of our Conference. Also, I would like to express my gratitude to all sponsors who believed in the importance of this Conference and co-financed it. I also thank all the other institutions that supported the Conference in various ways, because without their support, the Conference could not have been organized. Last but not least, I would like to thank plenary lecturers, all authors and co-authors and guests for their participation in the Conference.

On behalf of the Organizing Committee

*Prof. dr Snežana Urošević, president*



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**TABLE OF CONTENTS**

---

<b>PLENARY LECTURES</b>	<b>1</b>
<b>Radomir Folić, Damir Zenunović</b> <b>TEXTILE REINFORCED CONCRETE</b>	<b>3</b>
<b>Marija Vukčević, Biljana Pejić, Marina Maletić, Katarina Trivunac, Mirjana Kostić</b> <b>CONTRIBUTION TO THE CIRCULAR ECONOMY THROUGH THE</b> <b>UTILIZATION OF FIBROUS TEXTILE WASTE AS BIOSORBENTS FOR</b> <b>WATER PURIFICATION</b>	<b>17</b>
<b>Andreja Rudolf, Zoran Stjepanović, Tadeja Penko</b> <b>DIGITAL VERSUS REAL DRAPING OF TEXTILES</b>	<b>27</b>
<b>Iva Ćurić, Doris Curiš, Leonarda Bambić, Davor Dolar</b> <b>ENZYMATIC TREATMENT OF DYED COTTON KNITTED FABRIC WITH</b> <b>REUSED TEXTILE WASTEWATER</b>	<b>37</b>
<b>Ineta Nemeša, Marija Pešić</b> <b>THE MAIN CHARACTERISTICS OF SMART SEWING MACHINES</b>	<b>45</b>
<b>Kosana Vićentijević</b> <b>SUSTAINABILITY REPORTING IN THE TEXTILE INDUSTRY</b>	<b>62</b>
<b>CONFERENCE PAPERS</b>	
<b>SESSION I</b>	<b>71</b>
<b>Irem Çelik, Gizem Karakan Günaydın</b> <b>EVALUATION OF YARN PROPERTIES PRODUCED FROM MECHANICAL</b> <b>COMPACT AND CONVENTIONAL RING SPINNING SYSTEMS</b>	<b>73</b>
<b>Matea Korica, Mirjana Kostić</b> <b>THE INFLUENCE OF LONG-TERM AGING ON THE PROPERTIES OF TEMPO</b> <b>OXIDIZED COTTON</b>	<b>82</b>
<b>Hülya Kesici Güler, Funda Cengiz Çallioğlu</b> <b>EFFECT OF PHASE RATIO ON CORE-SHEATH COMPOSITE NANOFIBERS</b> <b>MORPHOLOGY</b>	<b>92</b>
<b>Ana Santiago, Cláudia Pinheiro, Nuno Belino</b> <b>DEVELOPMENT OF NEW TEXTILE APPLICATIONS USING NETTLE</b> <b>FIBRE</b>	<b>101</b>

---





**Emilija Toshikj, Igor Jordanov**

**CHITOSAN-BASED DIFFERENTLY OXIDIZED COTTON YARNS ANALYZED  
BY FTIR-ATR** 108

---

**Koviljka Asanovic, Nadiia Bukhonka, Tatjana Mihailovic, Isidora Cvijetic, Mirjana  
Reljic, Mirjana Kostic**

**INFLUENCE OF PILLING ON THE STRUCTURAL CHARACTERISTICS OF  
FLAX PLAIN WEFT-KNITTED FABRICS** 115

---

**Jovana Stepanović, Tatjana Šarac, Nataša Stamenković, Nenad Ćirković, Dušan  
Trajković, Jovan Stepanović**

**THE INFLUENCE OF TENSILE FORCE ON THE MORPHOLOGICAL  
CHARACTERISTICS OF TEXTURED POLYESTER MULTIFILAMENT  
YARNS** 125

---

**Hülya Kesici Güler, Funda Cengiz Çallioğlu**

**PCL BASED NANOFIBROUS WOUND DRESSING DESIGN** 130

---

**Mokina Anna Y, Ulme Andra**

**MODERN ECOTEXTILE IN FASHION AND INTERIOR** 138

---

**Damjana Celcar, Tanja Pilar**

**ACOUSTIC TEXTILES FOR INTERIOR** 146

---

**Liudmyla Melnyk, Olena Kyzymchuk**

**PROSPECTS OF FUNCTIONAL TEXTILE PRODUCTS FOR REHABILITATION  
AFTER LIMB AMPUTATION** 156

---

**Lazaros Firtikiadis, Prodromos Minaoglou, Nikolaos Efkolidis, Panagiotis Kyratsis**  
**SLIPPER-SOLE COMPUTATIONAL DESIGN: A CUSTOMER-BASED  
APPROACH** 162

---

**Nikola Hranković, Dragan Živanić, Mirko Katona**

**ANALYSIS OF THE CONVEYOR BELT TENSILE PROPERTIES** 173

---

**Marija Stoicovska, Frosina Vielickova, Sara Srebrenkoska, Svetlana Risteska, Sanja  
Risteski, Vineta Srebrenkoska**

**UTILIZING VACUUM BAGGING PROCESS TO PREPARE CARBON/EPOXY  
COMPOSITE LAMINATES** 181

---

**Teodora Gvoka, Gojko Vladić, Nemanja Kašiković, Katarina Maričić, Gordana  
Bošnjaković, Savka Adamović**

**THE UTILIZATION OF WASTE TEXTILE MATERIALS IN THE PACKAGING  
PRODUCTION** 186

---



**Maja Jankoska, Ruzica Stevkovska-Stojanovska**

**APPLICATION OF FUTURISTIC DESIGN IN WOMEN'S CLOTHING  
MODELING 194**

---

**CONFERENCE PAPERS  
SESSION II 203**

---

**Gordana Kokeza, Sonja Josipović, Snežana Urošević**  
**POSSIBILITIES OF APPLICATION OF THE GREEN ECONOMY CONCEPT IN  
THE BUSINESS OF THE TEXTILE INDUSTRY 205**

---

**Dragan Dimitrijević, Natalija Dimitrijević, Jasmina Gligorijević**  
**E-BUSINESS IMPLEMENTATION TRENDS IN SMALL AND MEDIUM-SIZED  
ENTERPRISES OF THE TEXTILE AND CLOTHING INDUSTRY 216**

---

**Bruno Završnik**  
**THE IMPORTANCE OF INFLUENCER MARKETING IN FASHION CLOTHING  
BRANDS 229**

---

**Njegoš Dragović, Snežana Urošević, Milovan Vuković, Dragoljub Đorđević, Zoran  
Stević**  
**DECRISING POLUTION IN TEXTILE INDUSTRY WITH RECYCLED AND  
NEW MATERIALS 236**

---

**Biljana Popović, Adela Medović Baralić, Tijana Adžić, Ljiljana Sretković**  
**ECOLOGICAL PROCEDURES AND TECHNOLOGIES IN THE TEXTILE  
INDUSTRY 247**

---

**Gordana Čolović, Nikola Maksimović, Aleksandar Marković**  
**APPLICATION OF ERGONOMIC STANDARDS TO INCREASE SAFETY AND  
HEALTH IN THE GARMENT INDUSTRY 260**

---

**Ivana Mladenović-Ranisavljević, Violeta Stefanović, Aleksandar Savić, Snežana  
Urošević, Milovan Vuković**  
**IMPLEMENTATION OF THE 5S METHOD IN OPTIMIZING THE  
WORKPLACE - A TEXTILE TESTING LAB 264**

---

**Gordana Čolović, Danijela Paunović, Nikola Maksimović, Mina Paunović**  
**WORKPLACE INNOVATION 272**

---

**Olga Stojanović, Kristina Savić, Marija Savić Pojužina, Jelica Simeunović**  
**DETERMINING THE OPTIMUM SERIES SIZES FOR PRODUCTION IN THE  
CLOTHING INDUSTRY 276**

---



<b>Bruno Završnik</b> <b>FEMALE SHOPPING BEHAVIOR TOWARDS FASHION HANDBAGS</b>	<b>284</b>
<b>Andrea Dobrosavljević, Snežana Urošević, Đorđe Nikolić</b> <b>BUSINESS PROCESS ORIENTATION AS A BASE FOR ORGANIZATIONAL DEVELOPMENT OF TEXTILE INDUSTRY SMEs</b>	<b>292</b>
<b>Sanja Risteski, Silvana Zhezhova, Saska Golomeova Longurova, Sonja Jordeva</b> <b>FASHION IN SPAIN AS AN INSPIRATION FOR DESIGN AND CONSTRUCTION OF CONTEMPORARY CHILDREN'S CLOTHING</b>	<b>299</b>
<b>Dragana Frfulanović, Milena Savić</b> <b>ART OF THE 20TH CENTURY AS INSPIRATION IN FASHION DESIGN</b>	<b>308</b>
<b>Marina Jovanović</b> <b>WOMEN IN THE FUNCTION OF ORGANIZATIONAL COMMITMENT IN THE MANUFACTURE OF PIROT RUGS</b>	<b>315</b>
<b>Miličić Ljiljana, Mina Paunović</b> <b>SUSTAINABILITY IN FASHION-MODULAR CLOTHING INSPIRED BY THE NATIONAL COSTUMES OF DISTANT NATIONS</b>	<b>325</b>
<b>Maja Jankoska, Ruzica Stevkovska-Stojanovska</b> <b>MODELING OF WOMEN'S PANTS INSPIRED BY 60s AND 70s</b>	<b>332</b>
<b>Kristina Savić, Olga Stojanović, Marija Savić Pojužina, Jelica Simeunović</b> <b>DEVELOPMENT TENDENCIES OF UNIFORMS FOR POLICE OFFICERS ON MOTORCYCLES</b>	<b>341</b>
<b>Vasilije Petrović, Dragan Đorđić, Samir Pačavar, Anita Milosavljević, Predrag Pecev, Marija Petrović</b> <b>DUAL MODEL OF TRAINING TEXTILE ENGINEERS FOR THE NEEDS OF THE 4.0 INDUSTRY</b>	<b>350</b>
<b>CONFERENCE PAPERS</b> <b>SESSION III</b>	<b>359</b>
<b>Emilija Toshikj</b> <b>UNCONVENTIONAL YARN STRUCTURE</b>	<b>361</b>
<b>Dušan Nešić</b> <b>APPLICATION OF SELF-ADHESIVE POLYETHYLENE FOAM (PE) AS A SUBSTRATE OR PROTECTION FOR CONDUCTORS</b>	<b>370</b>

---



<b>Ivanka Ristić, Aleksandra Mičić, Nebojša Ristić</b> <b>CHEMICAL CATIONIZATION OF COTTON FABRIC FOR IMPROVED ABSORPTION OF DIRECT DYES</b>	<b>374</b>
<b>Mehmet Çağlayan, Banu Hatice Gürcüm</b> <b>DEMATEL METHOD FROM MULTI-CRITERIA DECISION MAKING METHODS AND EXAMPLES IN TEXTILE FIELD</b>	<b>383</b>
<b>Marina Maletić, Marija Vukčević, Biljana Pejić, Mirjana Kostić, Aleksandra Perić Grujić</b> <b>ORGANIC DYES ADSORPTION ON CARBON ADSORBENTS DERIVED FROM WASTE COTTON AND COTTON/POLYESTER YARN</b>	<b>394</b>
<b>Svitlana Arabuli, Anastasiia Truba, Arsenii Arabuli, Liudmyla Hanushchak- Yefimenko</b> <b>OPTICAL PROPERTIES OF MODIFIED FABRICS INTENDED FOR PROTECTION AGAINST UV RADIATION</b>	<b>403</b>
<b>Đorđić Dragan, Petrović Vasilije, Samir Pačavar, Enis Kolić, Anita Milosavljević</b> <b>ANALYSIS OF MECHANICAL CHARACTERISTICS AND WATER VAPOR PERMEABILITY OF FABRICS USED FOR MAKING THE LINING OF GARMENTS</b>	<b>409</b>
<b>Silvana Zhezhova, Sonja Jordeva, Sashka Golomeova Longurova, Sanja Risteska, Vanga Dimitrijeva Kuzmanoska</b> <b>FINAL CONTROL OF MEN'S SHIRTS</b>	<b>415</b>
<b>Julieta Ilieva, Mariya Koleva</b> <b>FROM NATURE TO FASHION – DIGITALIZED ELEMENTS AS INSPIRATION FOR PERSONALIZED CLOTHING AND ACCESSORIES</b>	<b>424</b>
<b>Subrata Das, Amitabh Wahi, Nivetha Sharathi S</b> <b>COLOUR MATCHING OF TEXTILES USING DEEP LEARNING CONVOLUTIONAL NEURAL NETWORKS</b>	<b>434</b>
<b>Marija Petrović, Samir Pačavar, Vasilije Petrović, Dragan Đorđić, Anita Milosavljević, Predrag Pecev</b> <b>THE INFLUENCE OF SOCIAL MEDIA ON PROMOTIONAL ACTIVITIES OF CLOTHING PRODUCERS</b>	<b>441</b>
<b>Dimitrios Chaidas, Tatjana Spahiu, John Kechagias</b> <b>AN INVESTIGATION OF 3D PRINTING ON TULLE TEXTILE CHANGING THE PLATFORM LEVELLING</b>	<b>451</b>

---



**Adela Medović Baralić, Biljana Popović, Ana Krkobabić, Ljiljana Sretković**  
**NEW TRENDS IN THE TEXTILE INDUSTRY** 456

---

**Tatjana Spahiu, Andrea Ehrmann, Henrique Almeida, Antonio Jimeno-**  
**Morenilla, Panagiotis Kyratsis**  
**FOOTWEAR PRODUCTS AND THE ROLE OF INDUSTRY 4.0** 463  
**FOR SUSTAINABLE PRODUCTION**

---

**Author index** 473

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**FRIENDS OF THE CONFERENCE** 477

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## FASHION IN SPAIN AS AN INSPIRATION FOR DESIGN AND CONSTRUCTION OF CONTEMPORARY CHILDREN'S CLOTHING

Sanja Risteski<sup>1\*</sup>, Silvana Zhezhova<sup>1</sup>, Saska Golomeova Longurova<sup>1</sup>, Sonja  
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**ABSTRACT:** Fashion represents a kind of unique visual art, which centuries ago left a special mark in the history of every country, and in this case, especially in Spain. Each period in the history of clothing is special in its design, the material used and the abundance of colors that were striking at that time. Each period also represents a special inspiration for fashion designers today. In this paper two designs that are inspired by different periods of children's fashion, or rather, girls' fashion in Spain are shown. Designs will be shown part by part in the purposeful creation itself from idea to their realization. The materials and colors that are used will also represent a review of the period from which the designs were inspired.

**Keywords:** fabric, clothing, history, trends.

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## MODA U ŠPANIJI KAO INSPIRACIJA ZA DIZAJN I KONSTRUKCIJU SAVREMENE DEČIJE ODEĆE

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**APSTRAKT:** Moda predstavlja svojevrsnu jedinstvenu vizuelnu umetnost, koja je pre više vekova ostavila poseban trag u istoriji svake zemlje, a u ovom slučaju, posebno u Španiji. Svaki period u istoriji odeće je poseban po svom dizajnu, korišćenom materijalu i obilju boja koje su u to vreme bile upečatljive. Svaki period predstavlja i posebnu inspiraciju za današnje modne dizajnere. U ovom radu prikazana su dva dizajna koji su inspirisani različitim periodima dečje mode, odnosno devojačke mode u Španiji. Dizajni će biti prikazani deo po deo u samoj svrsishodnoj kreaciji od ideje do njihove realizacije. Materijali i boje koji se koriste takođe će predstavljati osvrt na period iz koga su dizajni inspirisani.

**Ključne reči:** tkanina, odeća, istorija, trendovi.

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### 1. INTRODUCTION

Designers in the textile and fashion industry are under constant pressure in terms of developing new design ideas where the design should be distinct and striking to keep the



customer's attention. The fashion industry is changing very rapidly and continuously and poses new challenges for fashion resources and skills.

Fashion, once manufactured, today turns into an industry, numerous and prestigious fashion houses located in France, Italy, London etc. Prestigious schools for the study of fashion design and clothing production are a clear indicator of how important fashion is in the world [1, 2].

The design process involves multiple creative processes such as research, analysis and decision making. Throughout the entire design process, sources of inspiration play a major role in creating special and unique designs. Inspiration is considered a magical tool for all designers and can be found everywhere.

Sources of inspiration and its personal interpretations, both visually and technically, are vital in increasing creativity in the design process. Anything visual can be a source of design inspiration. One source can be used as a source of inspiration, or multiple sources can be included in the creation itself [3].

### **1.1. Children's clothing in Spain as inspiration**

Children's fashion has always been special and inspiring, regardless of which period it belongs to. Designers in the world have always tried to create a special work of „art fashion“ when it comes to children's clothing.

When we talk about children's clothing in Spain, we should mention that Spanish fashion has always been unique, whether it is unique handmade dresses or mass-produced ones nowadays.

Spanish fashion has evolved throughout history, adapting to the changes and trends that were current at the time. Until the end of the nineteenth century, children were dressed in clothes similar to adults but with a much simpler design. Children's clothing was usually made by a family member or a tailor depending on the economic status of the family.

Mass production of children's clothing began in the 1870s, but at that time it was very simple without much imagination, made of lighter and more affordable material, and without many accessories on it. During that period cotton was mostly used because it was comfortable, safe and cheap to use in mass production. Cotton could also be dyed in a number of different colors and was available in a variety of weights and designs. It was especially used to make clothes for babies and small children up to three years of age [4, 5].

### **1.2. Children's clothing in Spain in different periods of history**

Fashion has been a part of our everyday life for centuries. In some classes it was adapted to the conditions, or more precisely, adapted to the conditions of work and living. For the higher classes it was an expression of style, power and wealth. From the beginning of the Industrial Revolution, fashion began to be introduced as a concept. During this time, Spain saw a significant change in the way its citizens were dressed.

During the last three centuries, Spanish fashion has been one of the economic drivers of the West. That's why fashion designers in Spain still cling to the thought "dressing well means knowing how to define your own identity".



Throughout history, Spanish fashion has become widespread and grown at an impressive rate [6, 7].

### **1.3. Spanish children's fashion in the period of Baroque**

Fashion in the Baroque period is characterized by rapid changes in design itself. This period is very specific for the fact that art and fashion lived their rise in Spain. During the Baroque period in Spain, children's fashion was influenced by the styles and trends of the time, but also reflected the social and economic status of the family.

In general, children's clothing during the Baroque period in Spain was a continuation of the elaborate and ornate styles popular among the wealthy and influential members of society, reflecting the social status and wealth of their families. During this period, the children of the situated or landed nobles were dressed as miniature adults which reflected their special social status, due to the fact that during this period children were often betrothed or already married at a very young age in order to strengthen the social, political and economic alliances.

During the Baroque period in Spain, children's clothing was characterized by sumptuous fabrics, intricate details, and lavish embellishments. Wealthy families often dressed their children in elaborate clothing made from luxurious materials such as silk, velvet and brocade imported from other countries and often decorated with lace, embroidery and pearls.

Girls wore a long dress with puffy sleeves and a narrow bodice, often with a low neckline and decorative lace or embroidery adorning the hem and sleeves.

During this period, the most available materials for production were cotton and linen and they were found in lower class clothing, while luxury materials such as silk, velvet and brocade were used in designs by the upper class. Due to the unavailability of all materials, brocade was only used in intricate designs of girls' dresses at that time, while silk and velvet were used for simpler designs. Bright colors were mostly used, but what characterizes that period is the use of red, gold, brown and silver [8, 9].

### **1.4. Spanish children's fashion in the Victorian Era**

The Victorian era was a time of great change and social upheaval in Europe, and children's clothing during this period reflected the era's emphasis on modesty and decency.

During the Victorian era, girls' clothing was distinguished by its modesty and decorative details. Girls often wore long dresses with high collars and sleeves, while boys wore suits with short pants and knee socks.

The colors and designs used for girls' clothing in Spain during this period were generally more subdued than those used for adult clothing, but still reflected the Victorian aesthetic. Special features of clothing for girls in Spain during the Victorian era are:

- Colors: Pastel colors were very popular, especially for girls clothing.
- Floral Prints: Floral patterns were very popular in girls' clothing. Most often, prints with delicate flowers and greenery were used, and they were also used for dresses, blouses and skirts.





- Lace and Embroidery: Lace and embroidery were popular decorative techniques for girls' clothing. Dresses and blouses for girls were often decorated with intricate lace collars and cuffs, as well as embroidery in floral or geometric patterns.
- Ruched collar and pleats: were another common feature of girls' clothing during the Victorian era. They were often used to add texture and dimension to dresses and skirts. They were usually made from lightweight materials such as muslin or organdy.
- Lace: Lace was a popular decorative element in this period, and was often used to decorate dresses, blouses and collars. It was usually made of fine cotton or linen thread, and sometimes combined with other materials such as silk or wool.
- Embroidery: Embroidery was another common decorative technique used in especially girls' clothing. Usually the embroidery was done by hand and was used in making complex models and designs of dresses, blouses and other clothes.

During the Victorian era, girls' clothing in Spain was usually made from a variety of materials, ranging from practical to delicate and decorative patterns.

In general, girls' clothing in the Victorian era was made from a wide variety of materials, depending on the occasion, season, and use of the clothing [9, 10, 11].

## 2. EXPERIMENTAL

### 2.1. Two designs inspired by fashion in Spain during the Baroque and Victorian era

#### 2.1.1. Inspiration for the Model 1

Baroque-inspired fashion always gives designers the freedom to excel in their creations through the use of a variety of fabrics and designs.

Model 1 is inspired by the same period and includes embossed brocade in brown/gold color which gives the model a luxurious look that the children of rich families wore at that time.

The luxury of the fabric and the exceptionality of the designs was an inspiration for creating a model that will immortalize that time in a children's dress and will abound with exceptionality in wearing.

#### 2.1.2. Description of Model 1

The model is a child's dress made of embossed brocade with knee length and short sleeves slightly gathered in the curve of the shoulders. The top of the dress is fitted, and there is a zipper at the back that extends 12 to 14 centimeters to the skirt. The skirt in the waist area, (where it is assembled with the upper part -blouse) is gathered in several folds.

For the production of this model, copper-gold brocade with a black base was used as the base material, black satin used for lining. the model also has: black hidden zipper, black male-female button and adhesive tape.



**Figure 1:** Inspiration for the Model 1

### 2.1.3. Description of Model 2

The Victorian period in terms of fashion designs is still very inspiring for many designers today. The inspiration for model 2 came from the idea of using many different materials at that time, especially the use of embroidery. In this model a special detail- a tapestry is sewn on the front of the dress, which, along with the corners, will capture the Victorian line, and in today's time, it will leave an impression of a unique design of a children's dress.



**Figure 2:** Inspiration for the Model 2

Model 2 is a dress made of organdy fabric in two colors: cream-gold and dark green. These two colors blend perfectly with the colors of the tapestry that is applied on the front of the dress. The skirt is made of two layers of organdy, and the upper one is cream-gold, and below it, the green one is a few centimeters longer. The sleeves are short and formed as balloon sleeve type. The 7 cm wide ribbon made from the same material is sewn on the neckline in order to wrap around the neck and tie a bow, and there is a hidden zipper on the back of the dress. The length of the whole dress is up to the knees.

### 3. RESULT AND DISCUSSION

#### 3.1. Model 1 (Tailoring, sewing, finishing)

The cut image of the top part of the dress is derived from the basic cut of a waist-length children's blouse. The skirt is a straight piece that connects to the upper part in the waist area and has precisely spaced pleats. The contours of the cut are drawn on the material, which is placed half-width and turned face to face. The sleeve of this model has a small fold in the shoulder area and because of this the modeling is done from a basic cut of the sleeve. Drawing is done with tailor's chalk that evaporates when ironing. Tailoring is done by hand with tailoring scissors, leaving seam allowances and pinching the locations of the folds. According to the upper parts - one front and two back parts, the lining is also cut.



**Figure 3:** Tailoring the Model 1

The sewing of the model is performed on a regular sewing machine type of stitch 301. The front and back parts of the face and the lining in the shoulder area and side are assembled and then ironed. A thin strip of adhesive interlining is glued in the area of the neckline. Assemble the face and the lining in the area of the neckline with stitch 301 and a stitch width of 0.5 cm, fasten and pass a stitch of 0.2 cm.



**Figure 4:** Final appearance of model 1

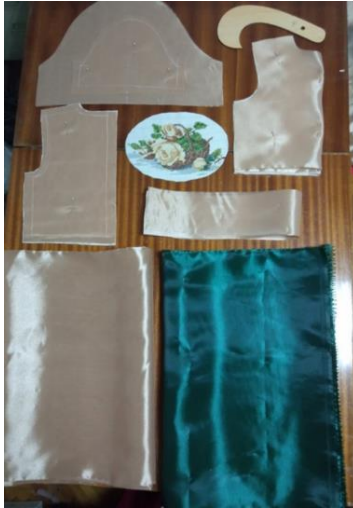
After ironing the neckline, an auxiliary stitch is passed around the sleeve curve, which joins the material and the lining together. The sleeve is assembled and the seam allowance is closed and hemmed on an overlocker with stitch 504, with which the hem is also processed. After ironing, the sleeve is sewn on the sleeve curve and the seam allowance is hemmed on the overlock. The tailored straight piece intended for the skirt is assembled at the back center, leaving a 12-14cm opening for sewing the zipper. On a regular sewing machine, the pleats are formed in the waist area and then assembled with the upper part. The hidden zipper is sewn in the middle of the back. The lining in the zipper area is closed with a regular stitch 301 and then the same is closed in the waist area. The hems of the sleeves are fold, the skirt is also fold up to 2.5 cm and passed with a stitch.

### **3.2. Model 2 (Tailoring, sewing, finishing)**

The upper part of the dress is constructed according to the basic pattern of a children's blouse and the lining is also cut according to the same pattern. The sleeve consists of two parts: a straight short sleeve and a patterned flared sleeve which together form a balloon sleeve. The skirt is made from two lengths of cream gold organdy and one and a half lengths of dark green organdy. The strap around the neck is also cut out of the creamy gold organdy. The seam allowances are 12mm. The tapestry has an elliptical shape to fit nicely on the front top. The contours are drawn by hand with chalk directly on the material, and the cutting is done by hand with tailor's scissors.

The sewing of model 2 starts by sewing the tapestry on the front top, a 2 mm stitch is passed to prevent the corner from tasseling. The side and shoulder edges of the base material and lining are assembled, the seam allowances are ironed. The base and lining are fixed together facing outwards in the area of the neckline and sleeve curve. The patterned sleeve is folded in the middle at the lower end and sewn to the base sleeve to form the sleeve hem. The two parts of the balloon sleeve are closed on the inner edge. Tight fold is made on the sleeve curve and then attached to the base material sleeve.

The balloon sleeves prepared in this way are sewn to the upper part (blouse) and the seam allowances are hemmed with a stitch 504. The two parts of cream organdy and two parts of green organdy are assembled on the skirt and the seam allowances are hemmed with stitch 504. The hem of both skirts are sewn with thickened stitch 504.



**Figure 5:** Tailoring the Model 2



**Figure 6:** Final appearance of model 1

A zipper opening is constructed to be in the middle of the back of the cream skirt and then both materials are gathered up to the waist circumference and assembled with the upper part forming one edge. The previously ironed piece of tape is sewn to the neckline in half width, the seam allowance is pinched and the tape is turned over and closed. A hidden zipper is sewn on the middle of the back of the dress on a regular sewing machine with stitch 301. Finally, the lining is closed in the area of the zipper and the waist. Finishing a sewn model includes cleaning the threads, checking the sewing quality, checking the measurements according to the mass table and ironing the finished product.

#### 4. CONCLUSION

Throughout history, children's clothing in Spain has been influenced by various factors, including social status, cultural traditions, and changing ideas about what childhood should look like and the role of children in society. However, regardless of the period, the design of children's clothing in Spain has always been influenced by the needs and preferences of the children themselves, as well as the cultural and social norms of the time. Children's clothing nowadays is designed to be primarily comfortable and practical, but you can still find uniquely made designs from the Victorian era, Baroque, Romanticism, etc.

Designers often incorporate pleated collars, lace and embroidery into their designs, drawing inspiration from the intricate details of historical children's clothing. Similarly,



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the use of sumptuous fabrics such as silk, velvet and brocade is still prevalent in children's fashion, reflecting the influence of various historical fashion periods from Spain. Overall, the influence of children's clothing in Spain throughout history can be inspiration for designers and fashion houses to design and produce modern children's fashion, reflecting a rich and diverse cultural heritage that continues to shape fashion trends for children today.

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