

# *Festival of Materials & Making*

7th - 11th November 2011

[www.instituteofmaking.org.uk](http://www.instituteofmaking.org.uk)

**KING'S**  
*College*  
**LONDON**

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# *Contributors*

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## *With Thanks*

The Institute of Making wishes to thank all those who have helped make the *Festival of Materials & Making* possible. Specifically; Alan Read, Carl Miller, David Gates, Florence Grant, Gillian Sales, Glyn Baker, Graziella Terracciano, Helen Carnac, Hope Wolf, Jamie Lorimer, Jayne Lawrence, Julian Greenburg, Klaus Suhling, Lee Bailey, Mark Miodownik, Martin Conreen, Miranda Laughlin, Oliver Browne, Phil Howes, Rachel Meredith, Ruth Adams, Sheila Anderson, Sue Grimmond, Tim Laughlin, Will Wootton, William Edwards and Zoe Laughlin.

# ***Contents***

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2 ***Contributors***

3 ***Contents***

4 ***About***

6 ***Timetable***

8 ***Event Listing***

8 *Intelligent Trouble*

9 *The Shed*

9 *Materials Vending Machines*

10 *The Essence of Fluorescence*

10 *Radioactive Materials*

11 *Jam: Does exactly what it says on the (pec)tin*

12 *Life Sciences Museum: Animal Materials & Making*

13 *Making, Breaking & Repair*

14 *London Incorporated: the Body and the City*

15 *A Body in Jars*

15 *Stone: Walking Tour*

16 *Stone: Demonstration & Workshops*

16 *Stone: The Material & Those Who Make With It*

17 *Materials & Making; The Grand Finale*

18 ***Maps***

# *About*

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## *The Institute of Making*

The Institute of Making is a multidisciplinary research club for those interested in the made world: from makers of molecules to makers of buildings, synthetic skin to spacecraft, soup to clothes, furniture to cities. Its mission is to provide all makers with a creative home in which to innovate, contemplate and understand all aspects of materials and promote, inspire and celebrate their relationship to making.

At the heart of the Institute of Making is the Materials Library –a repository of some of the most extraordinary materials on earth, gathered together not only for scientific interest, but also for their ability to fire the imagination and advance conceptualisation.

## *The Festival of Materials & Making*

We at the Institute of Making proudly present our first *Festival of Materials & Making*. Running from the 7th to the 11th of November, the festival will invade spaces across the campuses of King's College London and showcase work being done by experts across a number departments at King's and beyond, with representation from War Studies and Physics to Classics and Life Sciences. Don't miss the slew of activities, which will include artist interventions in public spaces, tours, demonstrations, talks, exhibitions and overall serendipitous encounters with all things related to materials and making. All events and activities are free, but some will require booking.

*For the latest information about the Festival of Materials & Making,  
please see our website: [www.instituteofmaking.org.uk](http://www.instituteofmaking.org.uk)  
or follow us on twitter: @of\_making*



# Timetable

## Monday

**Jam: Does exactly what it says on the (pec)tin** (p. 11)  
5:30pm - 7:30pm  
Strand Campus

**The Shed** (p.9)  
10am - 6pm  
Strand Campus

**Intelligent Trouble** (p.8)  
10am - 6pm  
Strand Campus

**Materials Vending Machines** (p.9)  
10am - 6pm  
Strand Campus

**The Essence of Fluorescence** (p.10)  
10am - 6pm  
Strand Campus

**Radioactive Materials** (p.10)  
10am - 6pm  
Strand Campus

## Tuesday

**Life Sciences Museum** (p. 12)  
10am - 6pm  
Guy's Campus

**The Shed** (p.9)  
10am - 6pm  
Strand Campus

**Intelligent Trouble** (p.8)  
10am - 6pm  
Strand Campus

**Materials Vending Machines** (p.9)  
10am - 6pm  
Strand Campus

**The Essence of Fluorescence** (p.10)  
10am - 6pm  
Strand Campus

**Radioactive Materials** (p.10)  
10am - 6pm  
Strand Campus

## Wednesday

**Life Sciences Museum** (p.12)  
10am - 6pm  
Guy's Campus

**Making, Breaking & Repair** (p.13)  
10am - 12pm  
Strand Campus

**A Body in Jars** (p.15)  
11am - 8:30pm  
Guy's Campus

**London Incorporated: The Body and the City** (p.14)  
6:30pm - 8:30pm  
Strand Campus

**The Shed** (p.9)  
10am - 6pm  
Strand Campus

**Intelligent Trouble** (p.8)  
10am - 6pm  
Strand Campus

**Materials Vending Machines** (p.9)  
10am - 6pm  
Strand Campus

**The Essence of Fluorescence** (p.10)  
10am - 6pm  
Strand Campus

**Radioactive Materials** (p.10)  
10am - 6pm  
Strand Campus

## *Thursday*

### **Stone: Walking Tour** (p.15)

11am - 12pm & 12pm - 1pm

Strand Campus

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### **Stone: Demonstration & Workshops**

(p.16)

1pm - 3pm (Demonstration)

3pm - 5pm (Workshops)

Strand Campus

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### **Stone: The Material & Those Who Make With It**

(p.16)

5:15pm - 6:45pm

Strand Campus

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### **The Shed** (p.9)

10am - 6pm

Strand Campus

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### **Intelligent Trouble** (p.8)

10am - 6pm

Strand Campus

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### **Materials Vending**

**Machines** (p.9)

10am - 6pm

Strand Campus

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### **The Essence of**

**Fluorescence** (p.10)

10am - 6pm

Strand Campus

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### **Radioactive Materials**

(p.10)

10am - 6pm

Strand Campus

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## *Friday*

### **Materials & Making; The**

**Grand Finale** (p.17)

5pm - 7:30pm

Strand Campus

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### **The Shed** (p.9)

10am - 6pm

Strand Campus

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### **Intelligent Trouble** (p.8)

10am - 6pm

Strand Campus

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### **Materials Vending**

**Machines** (p.9)

10am - 6pm

Strand Campus

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### **The Essence of**

**Fluorescence** (p.10)

10am - 6pm

Strand Campus

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### **Radioactive Materials**

(p.10)

10am - 6pm

Strand Campus

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# *Event Listing*

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## *Intelligent Trouble*

*Everyday, 7th-11th, 10am - 6pm*

*South Staircase, King's Building, Strand Campus*



Using the staircase at the river-end of the main axis of the Strand campus as site and inspiration, the artist-led collective Intelligent Trouble will draw on rope-making as a way of working with spaces, materials, processes and people. The staircase moves through the vertical height of the whole building and will be used as a vast studio space, the artists will respond to the space working over the course of the week to make a constantly evolving and growing intervention.

Intelligent Trouble are a London-based collective of makers and artists and one of the founder-members is a PhD student in the humanities department at KCL.

[www.intelligenttrouble.wordpress.com](http://www.intelligenttrouble.wordpress.com)



## *The Shed*

*Everyday 7th-11th, 10am - 6pm  
Entrance Hall, King's Building,  
Strand Campus*



Come and visit the Institute of Making team in our shed; an information point and pop-up activity site for the Festival of Materials & Making.

Impromptu making workshops, and materials demonstrations will be occurring throughout the week. Feel free to bring along your own materials for examination under our microscope.

Keep an eye out for our twitter feed and website updates for the latest news.

@of\_making  
[www.instituteofmaking.org.uk](http://www.instituteofmaking.org.uk)

## *Materials Vending Machines*

*Everyday 7th-11th, 10am - 6pm  
The Shed, King's Building,  
Strand Campus*

Roll up, roll up. For one whole British pound (£1) you can chance your luck with one of our specially loaded vending machines. Dispensing material curiosities, wonders and delights, this is not only a bargain but a lottery as well, for one lucky person will be dispensed a fragment of Aerogel made by NASA's Jet Propulsion Laboratory. At 99.8% air, this is the lightest solid in the world and is blue for the same reason that the sky is blue. (See page 5 for a tempting picture!)



## *The Essence of Fluorescence*

Everyday 7th-11th, 10am - 6pm

King's Building, Strand Campus

The Institute of Making team resurrects their cabinet of fluorescent curiosities, first shown at the Hayward Gallery. Some of the highlights of the display include a full set of human teeth, a uranium glass fruit bowl, dodgy diamonds and 'GFP', the green fluorescent protein so popular in bioengineering.

(Below) A few grains of the Nile red molecule have been dissolved in five different solvents. The molecule reacts differently in each case, resulting in the production of different wavelengths of light when viewed under ultraviolet light.

The *Essence of Fluorescence* cabinets are located in the King's Building on level -1, directly below *The Shed* in the King's Building entrance hall.



## *Radioactive Materials*

Everyday 7th-11th, 10am - 6pm

King's Building, Strand Campus



Radioactivity permeates the world around us. From bananas to tea-cups, paints and aeroplanes, varying amounts of radioactive material have been present in some ordinary and some less-ordinary objects.

The Department of War Studies at King's College London, in collaboration with the Institute of Making's Materials Library, present a collection of radioactive materials. A cabinet of radioactive curiosities display the every-day alongside the unusual in order to invite discussion on our reactions to, and understanding of, radioactivity.

The cabinet is located in the King's Building on level -1, directly below *The Shed* in the King's Building entrance hall.

## *Jam: does exactly what it says on the (pec)tin*

Monday 7th, 5:30pm - 7:30pm

Anatomy Theatre Museum, 6th Floor King's Building, Strand Campus



A celebration of the art, science, craft and culture of all things jammy. This evening event will include cookery demonstrations and tasty treats, as well as talks on the history, politics and science of jams, jellies and marmalades.

Host, Dr Ruth Adams from King's College London, will be joined by the three following expert guests, each ready to share their preserving perspectives: Laura Mason is a food historian and cook with a special interest in British food traditions and will present *No Toast Required; quiddony, marmalade and jam in the English Kitchen*. Social and cultural historian Dr Maggie Andrews will give a talk entitled *Jam and Jerusalem: How the Women's Institute Movement found Feminism in Jam Making and Domestic Labour*. Dr Daniel Buchan will explore the biochemistry of jam and the science of setting points in a presentation entitled *Jamology*.

Feel free to bring your favourite jams along and be ready to get toasting.

## *Life Sciences Museum: Animal Material & Making*

*Tuesday 8th & Wednesday 9th 10am - 6:00pm*

*Hodgkin Building, Guy's Campus*



Visitors are invited to explore one of the gems of King's College London: the Museum of Life Sciences. Tucked away in the Hodgkin building, the eclectic collection brings to light the wonders of materials and making in the natural world. For half a billion years animals have been making non-living structures to protect their bodies, have sex, catch their food and provide habitation in which to live. They exploit different forms and properties of materials, sometimes of the same material, for different uses. Many examples show parallels with human 'making', and while some animal-made materials are used directly by humans for various purposes, others have inspired the invention of materials or objects that mimic their properties. This exhibition of Animal Materials and Making demonstrates the wide range of ways in which animals make and/or use materials. The use of these materials by man is also considered. Alongside the exhibiton, visitors are invited to take part in activities and chat to the expert team on hand who can help reveal some of the marvels of the collection. As an added bonus, beeswax candle making and honey tasting will be taking place in the afternoon of Wednesday 9th November.

A special direct entrance into the Life Sciences Museum has been created for this event and will be sign posted from outside the Hodgkin Building and Henriette Raphael House, Guy's Campus. See Page 19 for map.

# *Making, Breaking & Repair*

Wednesday 9th, 10am - 12pm

Anatomy Theatre Museum, 6th Floor King's Building, Strand Campus



Making, breaking and repair are powerful metaphors for talking about lived experience and the natural world. We can deepen our understanding of these ways of thinking and speaking through a focus on material processes, both contemporary and historical. Despite the recent turn to materiality in literary and historical studies there have been few attempts within these disciplines to engage with material practices - to learn to think with things as well as with language. This session will bring together different perspectives on material and materiality. A panel of speakers from a wide range of backgrounds will present their practices of making and repair, and their approaches to things that are broken, damaged or incomplete.

An open discussion and tea follow presentations from the following speakers:

Matthew Read (West Dean College) - *Historic Clock-Making Practices*

Jane ni Dhulchaointigh (Inventor of Sugru) - *A Repair Revolution: The Story of Sugru*

Jennifer Rampling (University of Cambridge) - *Alchemy and Incompleteness*

Florence Grant (History, KCL) and Chloe Porter (English, KCL) - *Closing Remarks*

## *London Incorporated: the Body and the City*

Wednesday 9th, 6:30pm - 8:30pm

Percy Robert's room, Gordon Museum, Hodgkin Building, Guy's Campus



85% of the human body is replenished every month. Only about 10% of the material in a human body carries human DNA. We are not stable bounded beings but permeable, dynamic superorganisms, composed of diverse materials including other living things. We live in continuous exchange with our material environment. Through diverse process of metabolism and incorporation – including eating, drinking, breathing, infection, radiation and movement – the world we live in becomes part of us and we in turn shape it.

This evening's talk series aims to explore the ways in which the materials of London are incorporated into the bodies of Londoners, be it through foodstuffs, commodities, organisms, water or air masses. Set within the stunning surroundings of The Gordon Museum (a world leading collection of over 10,000 pathological specimens demonstrating all aspects of disease in the human body), this promises to be an unmissable evening that will culminate in an array of London grown/sourced food and drink.

A special direct entrance (via the Life Sciences Museum) has been created for this event and will be sign posted from outside the Hodgkin Building and Henriette Raphael House, Guy's Campus. To avoid disappointment we suggest booking for this event by emailing ([hello@instituteofmaking.org.uk](mailto:hello@instituteofmaking.org.uk)) or via the events page of our website.



## *A Body in Jars*

*Wednesday 9th, 11am - 8:30pm*

*Life Sciences Museum, Hodgkin Building, Guy's Campus*

A Body in Jars is a collection of the chemical elements of life, and an exploration of their incredible role in making you what you are. The human body is really just a big chemistry set, shuffling elements around to make a huge range of miraculous materials. Almost 99% of your mass is made of only six elements: oxygen, carbon, hydrogen, nitrogen, calcium, and phosphorus. Of the 92 naturally occurring elements found on earth, it seems stunning that our bodies consist almost completely of only six of these elemental building blocks. However, the remaining 1% of your mass constitutes a large variety of other elements, all present in tiny amounts but performing some absolutely vital roles.



## *Stone: Walking Tour*

*Thursday 10th,*

*11am - 12pm & 12pm - 1pm*

*The Shed (meeting point), King's Building, Strand Campus*



Two walking tours of The Strand will be lead by stone expert, John Williams of the Natural History Museum.

The first tour (11am) will set off west to Embankment station and will look at natural stone in the built environment, ranging from ancient to modern use with stone ranging from Precambrian to Jurassic in age.

The second tour (12pm) will head east to Ludgate Circus and will look at the natural stone in the built environment, ranging from its use by Christopher Wren through post war reconstruction to modern cladding and paving.

(Participants are advised to arrive in good time as places are limited. To avoid disappointment we suggest booking by emailing: [hello@instituteofmaking.org.uk](mailto:hello@instituteofmaking.org.uk))

## ***Stone: Demonstration & Workshops***

*Thursday 10th,*

*Demonstration: 1pm - 3pm*

*The Shed, King's Building,  
Strand Campus*

A demonstration of stone carving techniques by Andy Tanser and Paul Jakeman. Andy has 30 years experience as an architectural stone carver, starting at 16 as a traditional apprentice with the Cambridge firm of Rattee & Kett.

*Workshops: 3pm - 5pm*

*The St David's Room, King's  
Building, Strand Campus*

This is your chance to have a go at stone carving using traditional hand tools for roughing out, shaping and finishing. English limestones will be supplied. The workshop will be divided into three lots of 30 minute sessions, with a maximum of 10 participants in each session. To book a slot or enquire about availability, please email [hello@instituteofmaking.org.uk](mailto:hello@instituteofmaking.org.uk)

## ***Stone: The Material & Those Who Make With It***

*Thursday 10th, 5:15pm - 6:45pm*

*The St David's Room, King's  
Building, Strand Campus*

Three talks from the following speakers bring the Stone day to a close.

Diana Clements from the Natural History Museum will present *Beneath your Feet: The Geology of London*. Kevin Hayward, the Building Material Specialist at Pre-Construct Archaeology Limited will talk on *400 Years of Quarrying, Supply and Carving*. Alan Lamb from City & Guilds will speak about *The Art of Reproduction and the Craft of Creativity*.





## *Materials & Making; The Grand Finale*

Friday 11th, 5pm - 7:30pm

Anatomy Theatre Museum, 6th Floor King's Building, Strand Campus



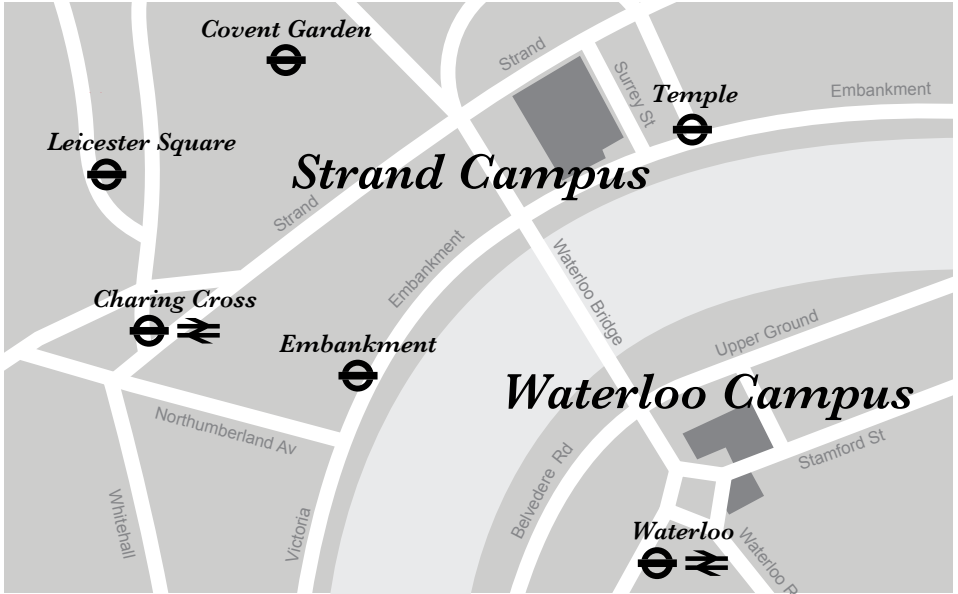
Join the Institute of Making team for an evening of conversation and demonstration. This is your chance to feed back to us your thoughts on the Festival of Materials & Making, as well as experience some of the hits of the week that you may have missed.

The evening will begin with an overview presentation and discussion before breaking out into activities and refreshments. Please join us for as much or as little of the evening as you can.

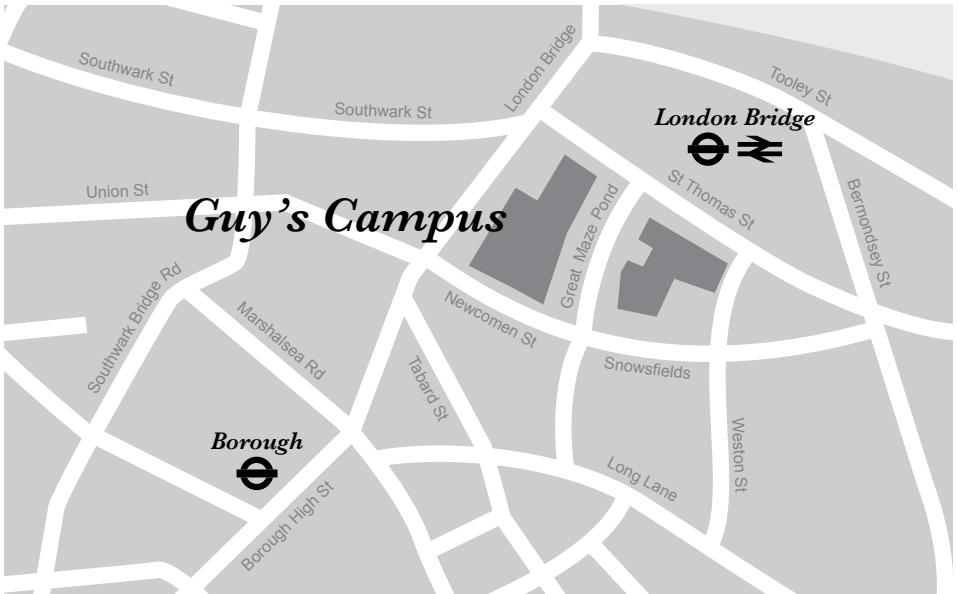
Food, drink and materials will flow.

# Maps

## Strand Campus & Waterloo Campus

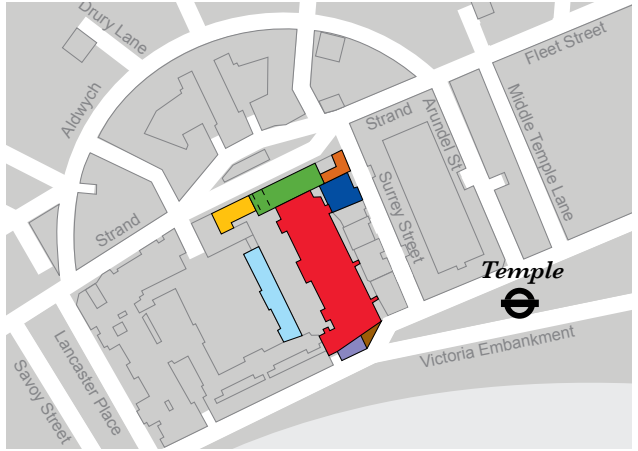


## Guy's Campus



## Strand Campus

- King's Building
- Strand Building
- 152-158 Strand
- North Wing
- East Wing
- South East Block
- South West Block
- Somerset House East Wing



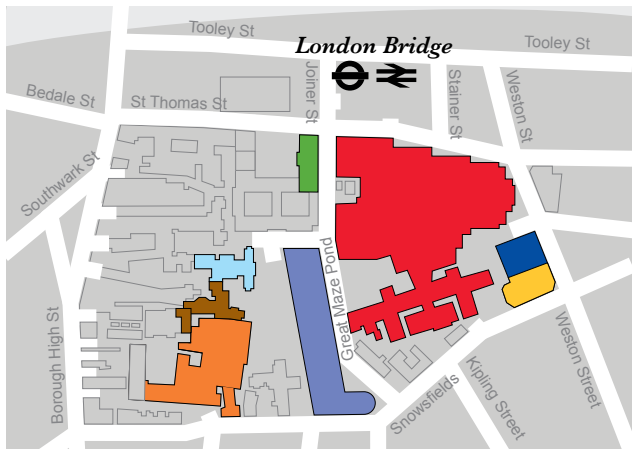
## Waterloo Campus

- Franklin-Wilkins Building
- James Clark Maxwell Building
- Stamford Street Apartments



## Guy's Campus

- Guy's Hospital
- Boland House
- Greenwood Theatre
- Hodgkin Building
- Wolfson House
- Henriette Raphael House
- New Hunt's House
- Shephard's House



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